D-Link®

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User Manual

Wireless AC1750 Dual-Band Gigabit Cloud Router USB 3.0

DIR-868L

Preface

D-Link reserves the right to revise this publication and to make changes in the content hereof without obligation to notify any person or organization of such revisions or changes.

Manual Revisions

Revision	Date	Description
1.01	July 08, 2013	• Initial release

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Table of Contents

Preface i
Manual Revisions i
Trademarks i

Product Overview 1
Package Contents 1
System Requirements 2
Introduction 3
Features 4
Hardware Overview 5
Connections 5
LEDs 6

Installation 7
Before you Begin 7
Wireless Installation Considerations 8
Manual Setup 9

Configuration 11
D-Link Quick Setup Wizard 12
QRS Mobile App (iOS, Android) 19
SharePort Mobile App (iOS, Android) 20
Web-based Configuration Utility 24
Internet Connection Setup 25
Static IP 26
Dynamic IP (DHCP) 27
PPPoE (Username/Password) 28
PPTP 30
L2TP 32
DS-Lite 34
Wireless Settings 35
Wireless Connection Setup Wizard 36
Wireless Security Setup Wizard 39
Add Wireless Device with WPS Wizard 41
Manual Wireless Settings 43
802.11 b/g/n (2.4 GHz) 43
802.11ac draft (5 GHz) 45
Wireless Security 47
Network Settings 51
Router Settings 52
DHCP Server Settings 53
DHCP Reservation 54
Storage 55
Media Server 56
IPv6 57
IPv6 Internet Connection Setup Wizard 58
Manual IPv6 Local Connectivity Setup 63
IPv6 Manual Setup 64
mydlink Settings 75
Advanced 76
Virtual Server 76
Port Forwarding 77
Application Rules 78
QoS Engine 79
Network Filters 81

Access Control 82
Website Filters....85
Inbound Filter 86
Firewall Settings....87
Routing....89
Advanced Wireless 90
Wi-Fi Protected Setup 91
Advanced Network 93
Guest Zone....94
IPv6 Firewall....95
IPv6 Routing 96
Tools 97
Admin 97
Time....98
SysLog....99
Email Settings 100
System 101
Firmware 102
Firmware Upgrade....102
Language Pack....102
Dynamic DNS 103
System Check....104
Schedules 105
Status 106
Device Info 106
Logs 107
Statistics 108
Internet Sessions....109
Routing....110
Wireless 111
IPv6 112
IPv6 Routing 113
Support 114

Connect a Wireless Client to your Router 115
WPS Button....115
Windows® 7....116
WPA/WPA2 116
WPS....119
Windows Vista®....123
WPA/WPA2 124
WPS/WCN 2.0 126
Windows® XP....127
WPA/WPA2 128

Troubleshooting 130

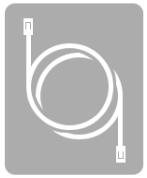
Wireless Basics 134
What is Wireless?....135
Tips....137
Wireless Modes....138

Networking Basics 139
Check your IP address....139
Statically Assign an IP address....140
Wireless Security 141
What is WPA? 141

Technical Specifications 142

Package Contents

DIR-868L Wireless AC1750 Dual-Band Gigabit Cloud Router USB 3.0



Ethernet Cable

Power Adapter

Wi-Fi Configuration Note

If any of the above items are missing, please contact your reseller.

Note: *Using a power supply with a different voltage rating than the one included with the DIR-868L will cause damage and void the warranty for this product.*

System Requirements

Network Requirements	• An Ethernet-based Cable or DSL modem • 802.11ac (draft), n, g, b, or a wireless or Ethernet port
Web-based Configuration Utility Requirements	**Computer with the following:** • Windows®, Macintosh, or Linux-based operating system • An installed Ethernet adapter **Browser Requirements:** • Internet Explorer 7 or higher • Firefox 3.5 or higher • Safari 4 or higher • Chrome 8 or higher **Windows® Users:** Make sure you have the latest version of Java installed. Visit www.java.com to download the latest version.

mydlink Requirements	• iPhone/iPad/iPod Touch (iOS 3.0 or higher)
	• Android device (1.6 or higher)
	• Computer with the following browser requirements:
	  • Internet Explorer 7 or higher
	  • Firefox 3 or higher
	  • Safari 5 or higher
	  • Chrome 5 or higher
	
	iPhone, iPad, and iPod touch are registered trademarks of Apple Inc. Android is a trademark of Google, Inc.

Introduction

The D-Link Wireless AC1750 Dual-Band Gigabit Cloud Router USB 3.0 (DIR-868L) comes equipped with four Gigabit ports to provide speeds up to 10x faster than standard 10/100 ports. It also uses 802.11ac (draft) technology with multiple intelligent antennas to maximize the speed and range of your wireless signal to significantly outperform 802.11n devices. With the addition of Intelligent Quality of Service (QoS), data streams are separated which helps organize and prioritize your network traffic so your video streaming, gaming, and VoIP calls run smoother over both your wired and wireless network.

The DIR-868L supports a host of cloud features inclouding QRS Mobile which allows you to setup and configure the router using a mobile app. You can set up your router right from your sofa, no PC required.

The Wireless AC1750 Dual-Band Gigabit Cloud Router USB 3.0 is also mydlink-enabled, which gives you access to your home network no matter where you go. Now you can monitor and manage your home network right from your laptop, iPhone®, iPad®, or Android™ device. mydlink-enabled routers can be configured to send an email to keep you informed anywhere, anytime when new devices are connecting to your network or unwanted access is detected. Monitor in real-time websites that are being visited with recent browser history displayed on the mydlink™ Lite app – which is great for parents.

SharePort Mobile technology lets you take advantage of the USB 3.0 port found on the back of your DIR-868L. Plug in a USB storage drive and you can use the SharePort Mobile app for iOS and Android to access files, stream videos, view photos, or listen to music on your laptop or mobile devices. Plug in a printer and you can use the SharePort Mobile Plus app to share that printer with all of your devices.

The DIR-868L Wireless AC1750 Dual-Band Gigabit Cloud Router USB 3.0 provides incredible speeds, smart antenna technology, fast ports, cloud features, and terrific security features. It also features an innovative design and easy installation options.

Features

- **Faster Wireless Networking** - The DIR-868L can provide up to a full 1750Mbps* wireless connection with concurrent 801.11ac and 802.11n wireless clients . It also operates on both the 2.4 GHz and 5 GHz bands to allow separation of traffic so users can participate in high-bandwidth activities, such as video streaming, online gaming, and real-time audio, without affecting low-priority traffic like email and web surfing.

- **Cloud Features** - The DIR-868L support the QRS Mobile app to setup the router using a mobile device. It is also mydlink-enabled so you can remotely access and mange your DIR-868L from a mobile device. SharePort Mobile can be used to share files, stream videos, view photos, and play music. SharePort Plus lets you share a printer.

- **Compatible with 802.11a/b/g/n Devices** - The DIR-868L is still fully compatible with the 802.11n, IEEE 802.11g and 802.11a standards, so it can connect with existing 802.11n, 802.11g, 802.11b, and 802.11a wireless devices.

- **Advanced Firewall Features** - The Web-based user interface displays a number of advanced network management features including:

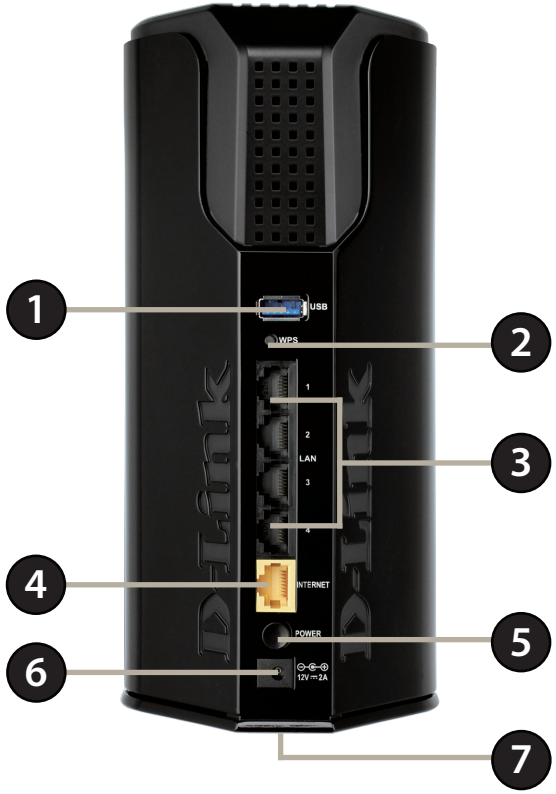
    - **Content Filtering** - Easily applied content filtering based on MAC Address, URL, and/or Domain Name.
    - **Filter Scheduling** - These filters can be scheduled to be active on certain days or for a duration of hours or minutes.
    - **Secure Multiple/Concurrent Sessions** - The DIR-868L can pass through VPN sessions. It supports multiple and concurrent IPSec and PPTP sessions, so users behind the DIR-868L can securely access corporate networks.

- **User-friendly Setup Wizard** - Through its easy-to-use Web-based user interface, the DIR-868L lets you control what information is accessible to those on the wireless network, whether from the Internet or from your company's server. Configure your router to your specific settings within minutes.

* Maximum wireless signal rate derived from IEEE Standard 802.11a, 802.11b, 802.11g, and 802.11n specifications. Actual data throughput will vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, and network overhead, lower actual data throughput rate. Environmental conditions will adversely affect wireless signal range.

Hardware Overview

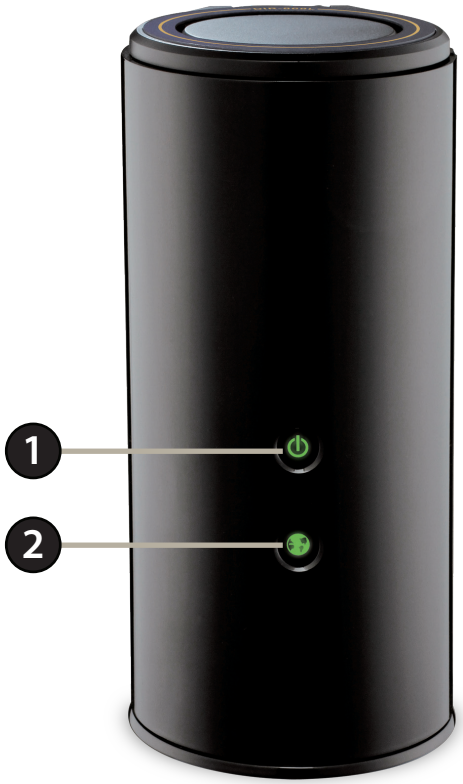
Connections



1	**USB 3.0 Port**	Connect a USB flash drive to share content , or connect it to a USB printer to share it on your network.
2	**WPS Button**	Press to start the WPS process and automatically create a secure connection to a WPS client.
3	**Gigabit LAN Ports (1-4)**	Connect Ethernet devices such as computers, switches, storage (NAS) devices and game consoles.
4	**Gigabit Internet Port**	Using an Ethernet cable, connect your broadband modem to this port.
5	**Power Button**	Press the power button to power on and off.
6	**Power Receptor**	Receptor for the supplied power adapter.
7	**Reset Button**	Insert a paperclip in the hole and wait for several seconds to reset the router to default settings.

Hardware Overview

LEDs



1	**Power LED**	A solid green light indicates a proper connection to the power supply. The light will blink green during the WPS process. The light will be a solid orange during boot up.
2	**Internet LED**	A solid light indicates connection on the Internet port. If the LED is orange, the connection is good but the router cannot connect to the Internet.

Installation

This section will walk you through the installation process. Placement of the router is very important. Do not place the router in an enclosed area such as a closet, cabinet, or in the attic or garage.

Before you Begin

- Please configure the router with the computer that was last connected directly to your modem.
- You can only use the Ethernet port on your modem. If you were using the USB connection before using the router, then you must turn off your modem, disconnect the USB cable and connect an Ethernet cable to the Internet port on the router, and then turn the modem back on. In some cases, you may need to call your ISP to change connection types (USB to Ethernet).
- If you have DSL and are connecting via PPPoE, make sure you disable or uninstall any PPPoE software such as WinPoet, Broadjump, or Enternet 300 from your computer or you will not be able to connect to the Internet.

Wireless Installation Considerations

The D-Link wireless router lets you access your network using a wireless connection from virtually anywhere within the operating range of your wireless network. Keep in mind, however, that the number, thickness and location of walls, ceilings, or other objects that the wireless signals must pass through, may limit the range. Typical ranges vary depending on the types of materials and background RF (radio frequency) noise in your home or business. The key to maximizing wireless range is to follow these basic guidelines:

1. Keep the number of walls and ceilings between the D-Link router and other network devices to a minimum - each wall or ceiling can reduce your adapter's range from 3-90 feet (1-30 meters.) Position your devices so that the number of walls or ceilings is minimized.

2. Be aware of the direct line between network devices. A wall that is 1.5 feet thick (.5 meters), at a 45-degree angle appears to be almost 3 feet (1 meter) thick. At a 2-degree angle it looks over 42 feet (14 meters) thick! Position devices so that the signal will travel straight through a wall or ceiling (instead of at an angle) for better reception.

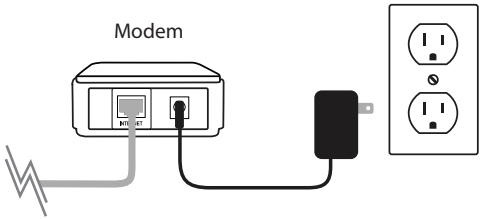
3. Building Materials make a difference. A solid metal door or aluminum studs may have a negative effect on range. Try to position access points, wireless routers, and computers so that the signal passes through drywall or open doorways. Materials and objects such as glass, steel, metal, walls with insulation, water (fish tanks), mirrors, file cabinets, brick, and concrete will degrade your wireless signal.

4. Keep your product away (at least 3-6 feet or 1-2 meters) from electrical devices or appliances that generate RF noise.

5. If you are using 2.4GHz cordless phones or X-10 (wireless products such as ceiling fans, lights, and home security systems), your wireless connection may degrade dramatically or drop completely. Make sure your 2.4GHz phone base is as far away from your wireless devices as possible. The base transmits a signal even if the phone in not in use.

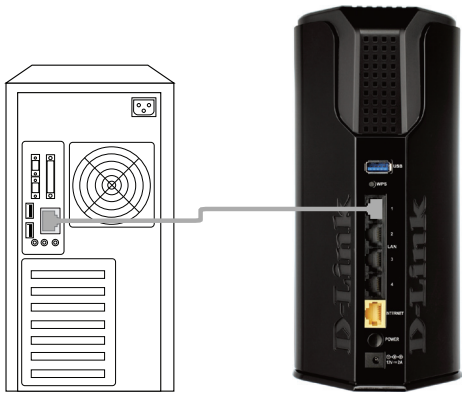
Manual Setup

1. Turn off and unplug your cable or DSL broadband modem. This is required.

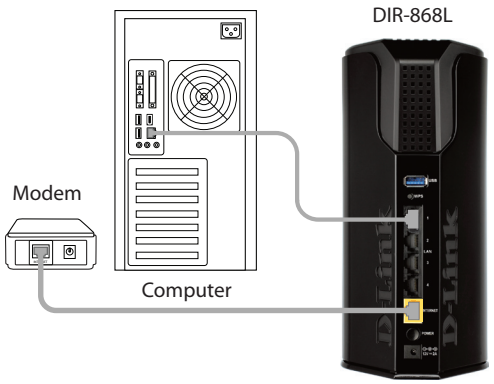


2. Position your router close to your modem and a computer. Place the router in an open area of your intended work area for better wireless coverage.

3. Unplug the Ethernet cable from your modem (or existing router if upgrading) that is connected to your computer. Plug it into the LAN port labeled **1** on the back of your router. The router is now connected to your computer.

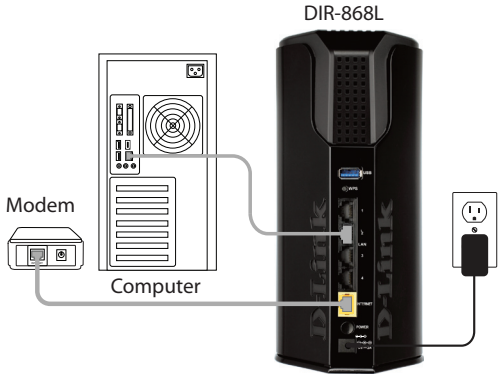


4. Plug one end of the included Ethernet cable that came with your router into the yellow port labeled INTERNET on the back of the router. Plug the other end of this cable into the Ethernet port on your modem.



5. Reconnect the power adapter to your cable or DSL broadband modem and wait for two minutes.

6. Connect the supplied power adapter into the power receptor on the back of the router and then plug it into a power outlet or surge protector. Press the power button and verify that the power LED is lit. Allow 1 minute for the router to boot up.



7. If you are connecting to a Broadband service, you may be online already and further configuration will be optional.

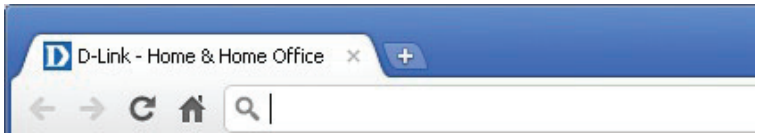
Configuration

There are several different ways you can configure your router to connect to the Internet and connect to your clients:

- **D-Link Setup Wizard** - This wizard will launch when you log into the router for the first time. Refer to page 12.
- **QRS Mobile App** - Use your iPhone, iPad, or iPod Touch to configure your router. Refer to page 19.
- **Manual Setup** - Log into the router and manually configure your router (advanced users only). Refer to pagepage 26.

D-Link Quick Setup Wizard

If this is your first time installing the router, open your web browser. You will automatically be directed to the **Wizard Setup Screen**.



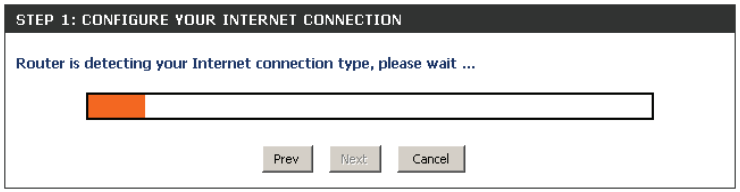
If the wizard does not open automatically, you can alternately reach the configuration utility by entering the IP address of the router (**http://192.168.0.1**). Please refer to page 24.

This wizard is designed to guide you through a step-by-step process to configure your new D-Link router and connect to the Internet.

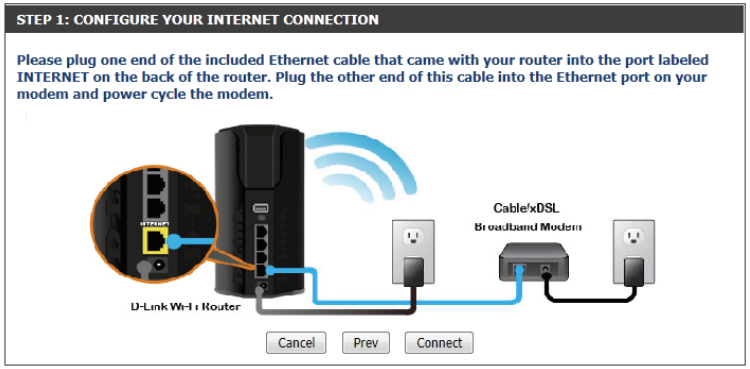
Click **Next** to continue.

WELCOME TO THE D-LINK SETUP WIZARD
This wizard will guide you through a step-by-step process to configure your new D-Link router and connect to the Internet.
Step 1: Configure your Internet Connection
Step 2: Configure your Wi-Fi Security
Step 3: Set your Password
Step 4: Select your Time Zone
Step 5: Confirm WI-FI settings
Step 6: mydlink Registration
Cancel
Next

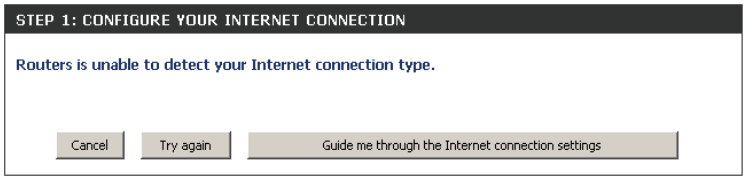
Please wait while your router detects your internet connection type. If the router detects your Internet connection, you may need to enter your ISP information such as username and password.



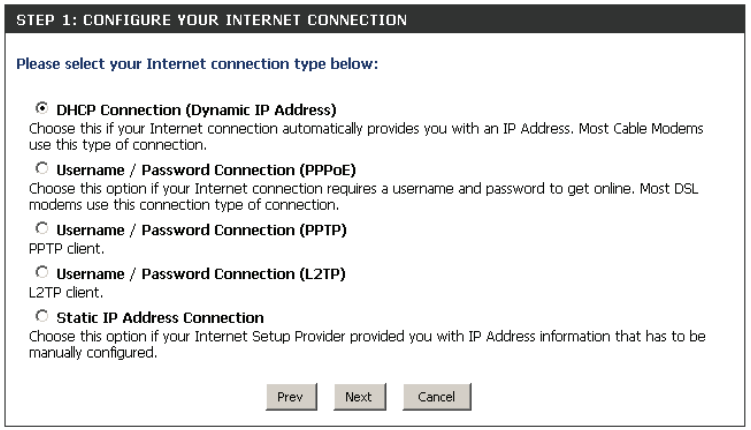
If the router does not detect a valid Ethernet connection from the Internet port, this screen will appear. Connect your broadband modem to the Internet port and then click **Try Again**.


STEP 1: CONFIGURE YOUR INTERNET CONNECTION
Please plug one end of the included Ethernet cable that came with your router into the port labeled INTERNET on the back of the router. Plug the other end of this cable into the Ethernet port on your modem and power cycle the modem.
Cable/xDSL
Broadband Modem
D-Link Wi-Fi Router
Cancel
Prev
Connect

If the router detects an Ethernet connection but does not detect the type of Internet connection you have, this screen will appear. Click **Guide me through the Internet Connection Settings** to display a list of connection types to choose from.

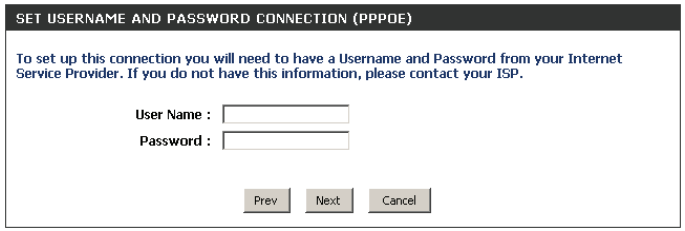

STEP 1: CONFIGURE YOUR INTERNET CONNECTION
Routers is unable to detect your Internet connection type.
Cancel
Try again
Guide me through the Internet connection settings

Select your Internet connection type and click **Next** to continue.

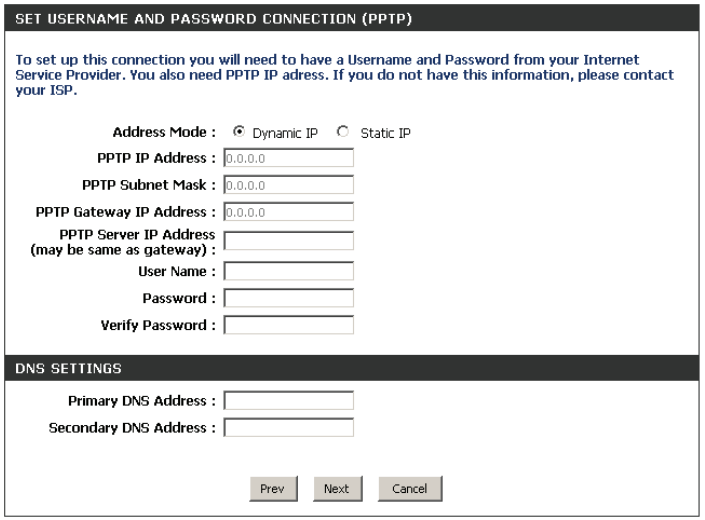

STEP 1: CONFIGURE YOUR INTERNET CONNECTION
Please select your Internet connection type below:
DHCP Connection (Dynamic IP Address)
Choose this if your Internet connection automatically provides you with an IP Address. Most Cable Modems use this type of connection.
Username / Password Connection (PPPoE)
Choose this option if your Internet connection requires a username and password to get online. Most DSL modems use this connection type of connection.
Username / Password Connection (PPTP)
PPTP client.
Username / Password Connection (L2TP)
L2TP client.
Static IP Address Connection
Choose this option if your Internet Setup Provider provided you with IP Address information that has to be manually configured.
Prev
Next
Cancel

If the router detected or you selected **PPPoE**, enter your PPPoE username and password and click **Next** to continue.

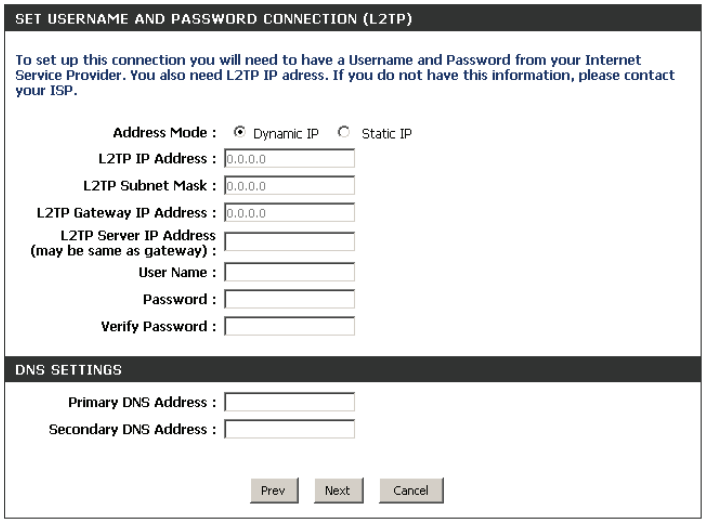
Note: *Make sure to remove your PPPoE software from your computer. The software is no longer needed and will not work through a router.*


SET USERNAME AND PASSWORD CONNECTION (PPPOE)
To set up this connection you will need to have a Username and Password from your Internet Service Provider. If you do not have this information, please contact your ISP.
User Name :
Password :
Prev
Next
Cancel

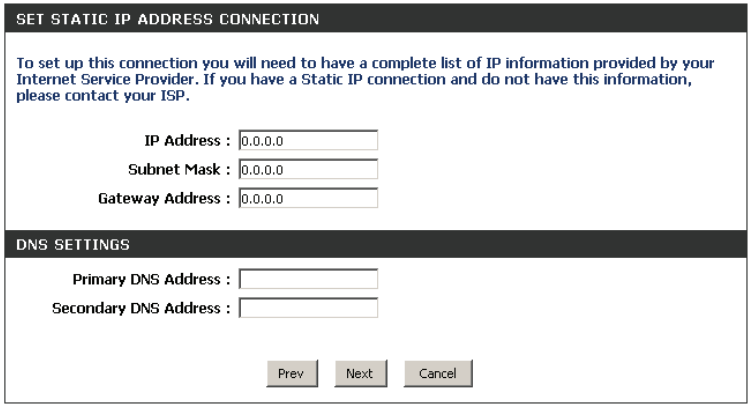
If the router detected or you selected **PPTP**, enter your PPTP username, password, and other information supplied by your ISP. Click **Next** to continue.


SET USERNAME AND PASSWORD CONNECTION (PPTP)
To set up this connection you will need to have a Username and Password from your Internet Service Provider. You also need PPTP IP adress. If you do not have this information, please contact your ISP.
Address Mode : Dynamic IP Static IP
PPTP IP Address : 0.0.0.0
PPTP Subnet Mask : 0.0.0.0
PPTP Gateway IP Address : 0.0.0.0
PPTP Server IP Address (may be same as gateway) :
User Name :
Password :
Verify Password :
DNS SETTINGS
Primary DNS Address :
Secondary DNS Address :
Prev
Next
Cancel

If the router detected or you selected **L2TP**, enter your L2TP username, password, and other information supplied by your ISP. Click **Next** to continue.


SET USERNAME AND PASSWORD CONNECTION (L2TP)
To set up this connection you will need to have a Username and Password from your Internet Service Provider. You also need L2TP IP adress. If you do not have this information, please contact your ISP.
Address Mode : Dynamic IP Static IP
L2TP IP Address : 0.0.0.0
L2TP Subnet Mask : 0.0.0.0
L2TP Gateway IP Address : 0.0.0.0
L2TP Server IP Address (may be same as gateway) :
User Name :
Password :
Verify Password :
DNS SETTINGS
Primary DNS Address :
Secondary DNS Address :
Prev
Next
Cancel

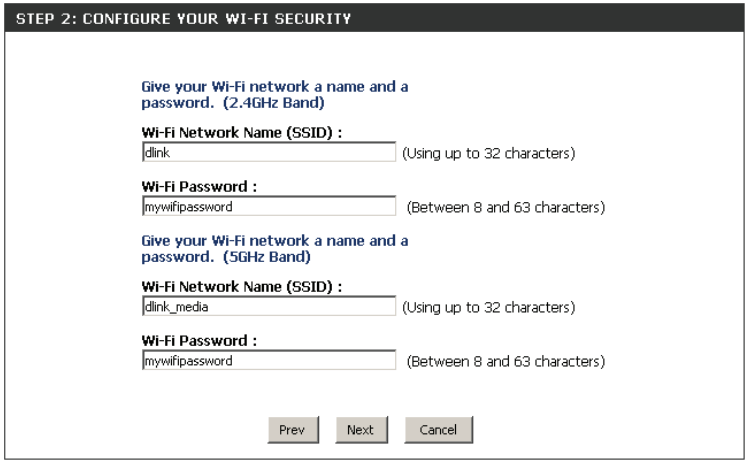
If the router detected or you selected **Static**, enter the IP and DNS settings supplied by your ISP. Click **Next** to continue.


SET STATIC IP ADDRESS CONNECTION
To set up this connection you will need to have a complete list of IP information provided by your Internet Service Provider. If you have a Static IP connection and do not have this information, please contact your ISP.
IP Address : 0.0.0.0
Subnet Mask : 0.0.0.0
Gateway Address : 0.0.0.0
DNS SETTINGS
Primary DNS Address :
Secondary DNS Address :
Prev
Next
Cancel

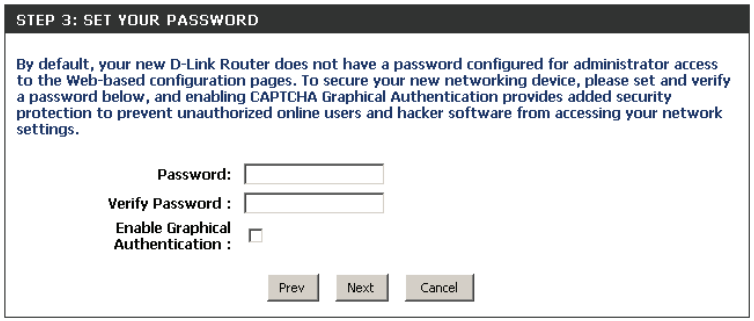
For both the 2.4GHz and 5GHz segments, create a Wi-Fi network name (SSID) using up to 32 characters.

Create a Wi-Fi password (between 8-63 characters). Your wireless clients will need to have this passphrase or key entered to be able to connect to your wireless network.

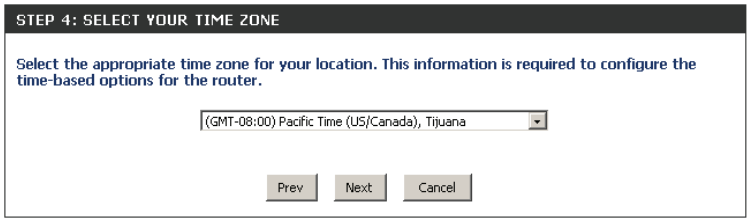
Click **Next** to continue.



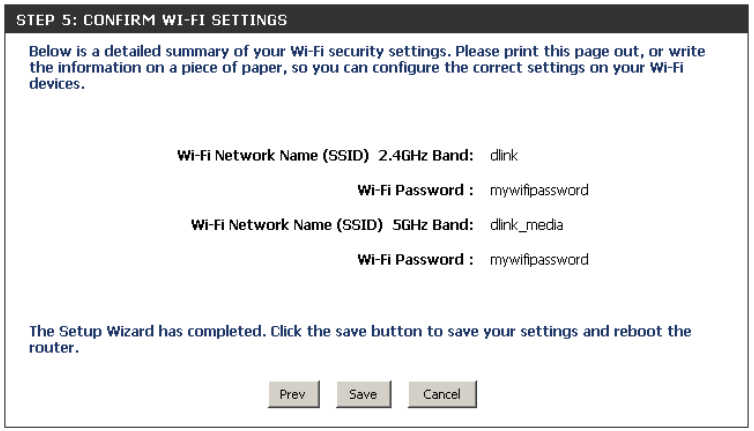
In order to secure your router, please enter a new password. Check the Enable Graphical Authentication box to enable CAPTCHA authentication for added security. Click **Next** to continue.


STEP 3: SET YOUR PASSWORD
By default, your new D-Link Router does not have a password configured for administrator access to the Web-based configuration pages. To secure your new networking device, please set and verify a password below, and enabling CAPTCHA Graphical Authentication provides added security protection to prevent unauthorized online users and hacker software from accessing your network settings.
Password:
Verify Password :
Enable Graphical Authentication :
Prev
Next
Cancel

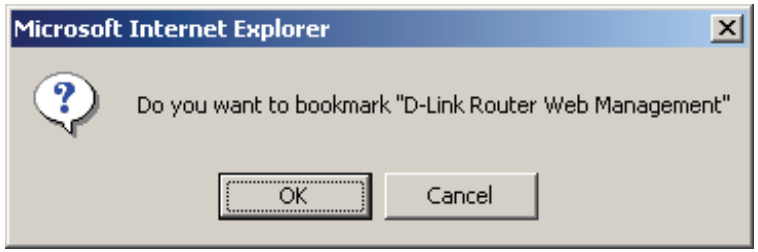
Select your time zone from the drop-down menu and click **Next** to continue.


STEP 4: SELECT YOUR TIME ZONE
Select the appropriate time zone for your location. This information is required to configure the time-based options for the router.
(GMT-08:00) Pacific Time (US/Canada), Tijuana
Prev
Next
Cancel

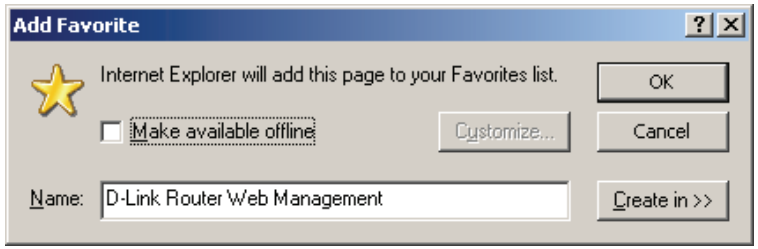
The Setup Complete window will display your Wi-Fi settings. Click **Save and Connect** to continue.


STEP 5: CONFIRM WI-FI SETTINGS
Below is a detailed summary of your Wi-Fi security settings. Please print this page out, or write the information on a piece of paper, so you can configure the correct settings on your Wi-Fi devices.
Wi-Fi Network Name (SSID) 2.4GHz Band: dlink
Wi-Fi Password : mywifipassword
Wi-Fi Network Name (SSID) 5GHz Band: dlink_media
Wi-Fi Password : mywifipassword
The Setup Wizard has completed. Click the save button to save your settings and reboot the router.
Prev
Save
Cancel

If you want to create a bookmark to the router, click **OK**. Click **Cancel** if you do not want to create a bookmark.

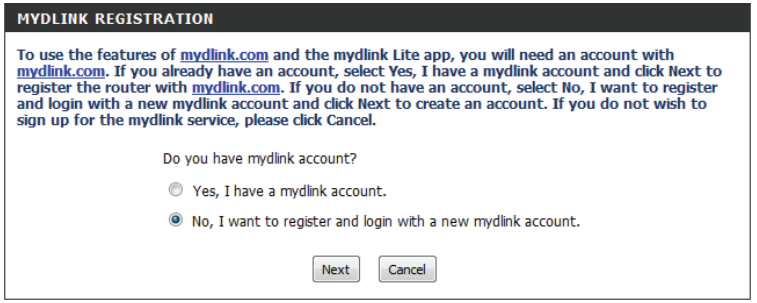


If you clicked **Yes**, a window may appear (depending on what web browser you are using) to create a bookmark.

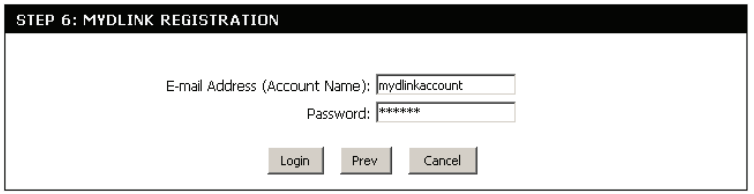


To use the mydlink service (mydlink.com or the mydlink Lite app), you must have an account. Select if you do have a mydlink account or if you need to create one. Click **Next** to continue.

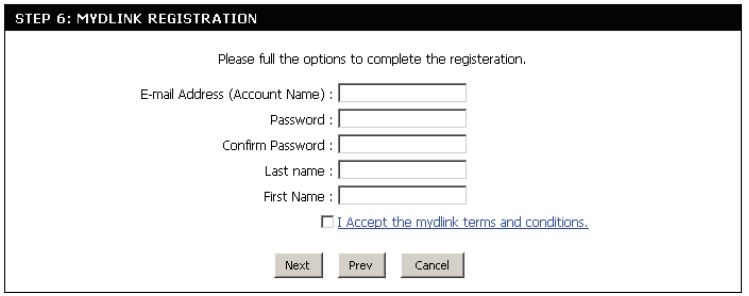
If you do not want to register at this time, click **Cancel**.


MYDLINK REGISTRATION
To use the features of mydlink.com and the mydlink Lite app, you will need an account with mydlink.com. If you already have an account, select Yes, I have a mydlink account and click Next to register the router with mydlink.com. If you do not have an account, select No, I want to register and login with a new mydlink account and click Next to create an account. If you do not wish to sign up for the mydlink service, please click Cancel.
Do you have mydlink account?
Yes, I have a mydlink account.
No, I want to register and login with a new mydlink account.
Next
Cancel

If you clicked **Yes**, enter your mydlink account name (email address) and password. Click **Login** to register your router.



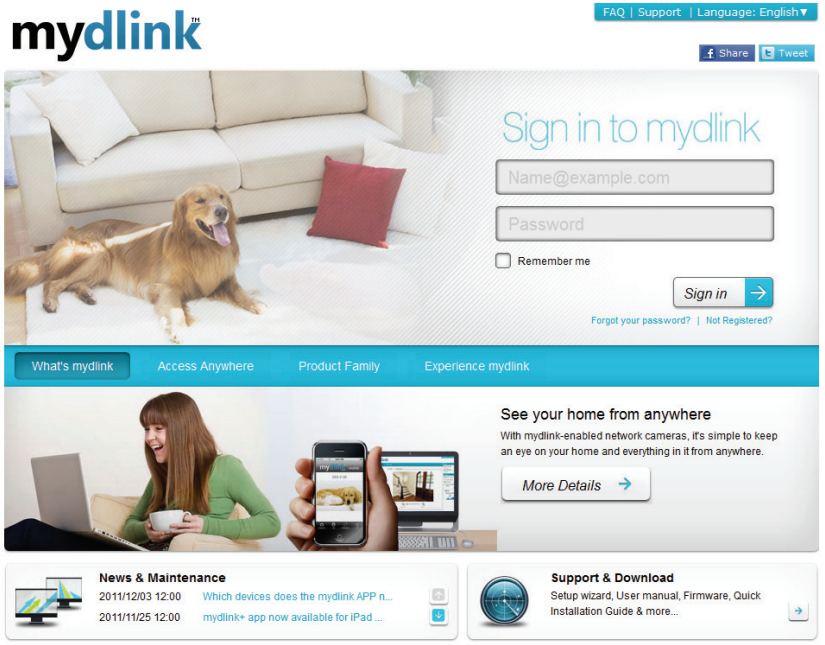
If you clicked **No**, fill out the requested information and click **Next** to create your mydlink account.



The mydlink App will allow you to receive notices, browse network users, and configure your router from an iPhone/iPad/iPod Touch (iOS 3.0 or higher), Android device (1.6 or higher).

To download the "mydlink lite" app, visit the Apple Store, Android Market or **http://mydlink.com/Lite**.

PC and Mac users can use the mydlink portal at **http://mydlink.com**.


mydlink
FAQ | Support | Language: English
Share
Tweet
Sign in to mydlink
Name@example.com
Password
Remember me
Sign in
Forgot your password? | Not Registered?
What's mydlink
Access Anywhere
Product Family
Experience mydlink
See your home from anywhere
With mydlink-enabled network cameras, it's simple to keep an eye on your home and everything in it from anywhere.
More Details
News & Maintenance
2011/12/03 12:00 Which devices does the mydlink APP n...
2011/11/25 12:00 mydlink+ app now available for iPad ...
Support & Download
Setup wizard, User manual, Firmware, Quick Installation Guide & more...

QRS Mobile App (iOS, Android)

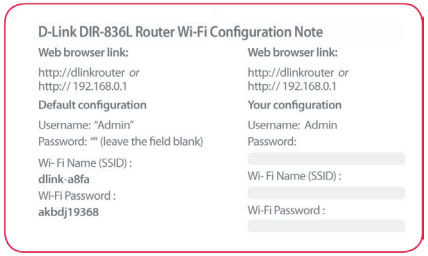
D-Link offers an app for your iOS or Android device to install and configure your router.

Step 1
From an iOS device, go to the iTunes Store. From an Android device go to Google Play. Search for 'D-Link', select **QRS Mobile**, and download the app to your device. You may also scan the appropriate code on the right to locate the app download page.

iOS

Android

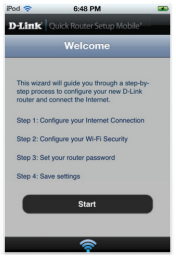
Step 2
Once your app is installed, you may now configure your router. Connect to the router wirelessly by going to your wireless utility on your device. Scan for the Wi-Fi name (SSID) as listed on the supplied info card. Select and then enter your Wi-Fi password.


D-Link DIR-836L Router Wi-Fi Configuration Note

Web browser link:
http://dlinkrouter or http://192.168.0.1
Default configuration
Username: "Admin"
Password: "" (leave the field blank)
Wi- Fi Name (SSID) :
dlink-a8fa
Wi-Fi Password :
akbdj19368

Web browser link:
http://dlinkrouter or http://192.168.0.1
Your configuration
Username: Admin
Password:
Wi- Fi Name (SSID) :
Wi-Fi Password :

Step 3
Once you connect to the router, launch the QRS mobile app and it will guide you through the installation of your router.

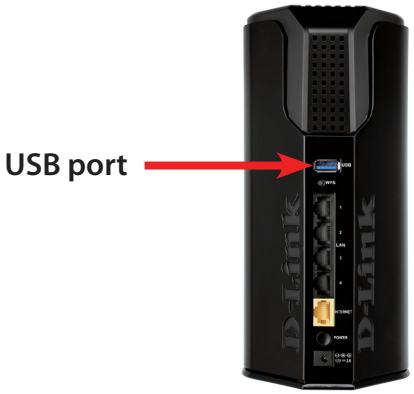

iPod
6:48 PM
D-Link Quick Router Setup Mobile
Welcome
This wizard will guide you through a step-by-step process to configure your new D-Link router and connect the Internet.
Step 1: Configure your Internet Connection
Step 2: Configure your Wi-Fi Security
Step 3: Set your router password
Step 4: Save settings
Start

SharePort Mobile App (iOS, Android)

The SharePort Mobile app will allow you to access files from a USB storage drive that is plugged into your router. You must enable file sharing from the **Setup** > **Storage** page (refer to page 22) for this app to work properly.

1. Plug your USB storage drive into the USB port.

   Note: The DIR-868L supports hard drives with up to one terabyte of storage capacity.



2. Use your iOS or Android mobile device to scan the QR code to the right to download the **SharePort Mobile** app.

   You can also search for the SharePort Mobile app directly in the iOS App Store or Google Play.

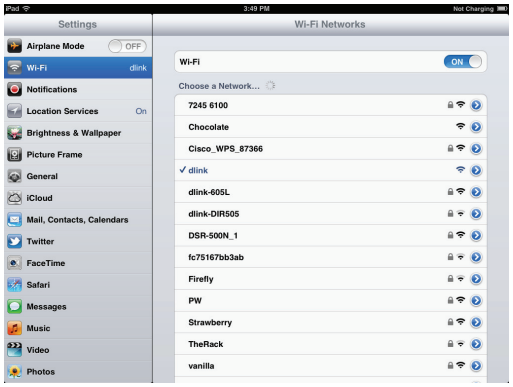
iOS

Android

3. From your iOS or Android mobile device, choose **Settings.**

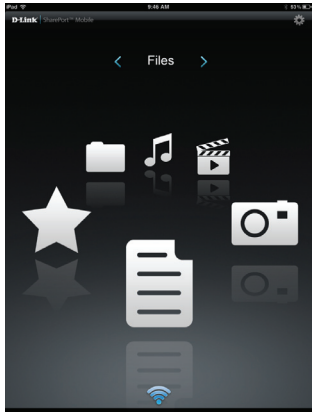
   Note: These steps are for the iOS version of the app. The Android version may differ slightly.

4. Click **Wi-Fi,** select the Wi-Fi Network Name (SSID) that you created during setup and then enter the default Wi-Fi password located on your Wi-Fi configuration note.

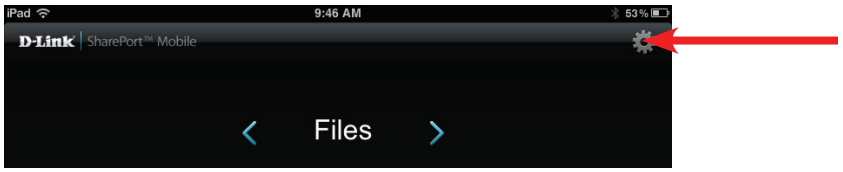


5. Once connected, tap on the **SharePort Mobile** icon.

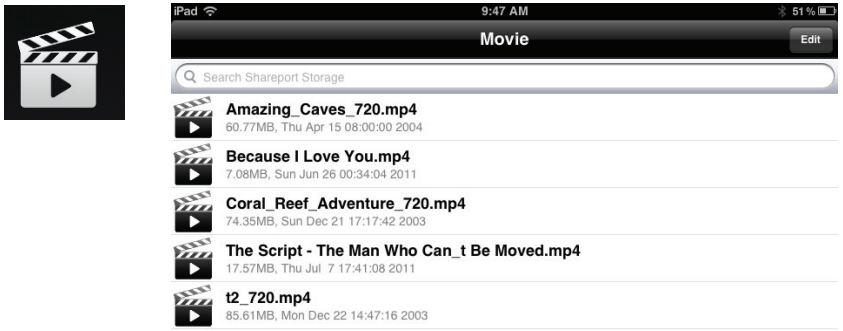
6. The following screen will appear.



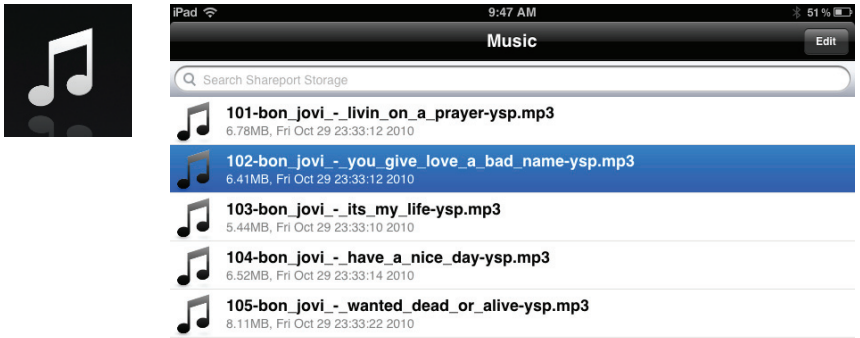
7. Tap on the **Settings** icon located on the right top corner of the screen. Tap **Edit** to enter your User Name and Password (the default username is **admin** and the password field should be left blank). Once you finish, click **Done** to continue.



8. For the Movie section, click the movie icon to play your movie from your USB flash drive.

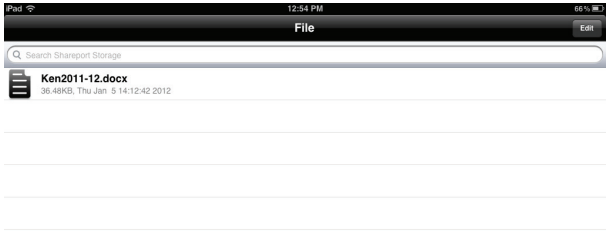


9. For the Music section, click the music icon to play your music from your USB flash drive.

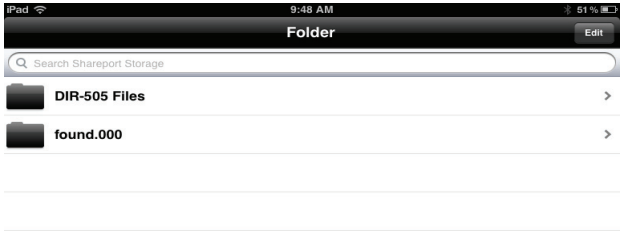


10. For the Photo section, click the Photo icon to view your photos from your USB flash drive.

11. For the Files section, click on the Files icon to view your files from your USB flash drive.



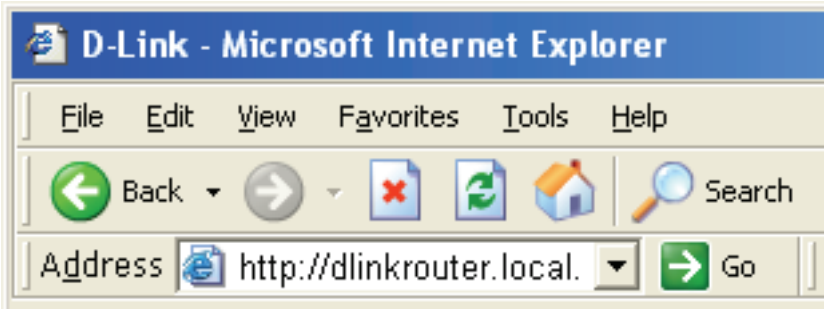
12. For the Folder section, click the folder icon to view your folders from your USB flash drive.



Web-based Configuration Utility

To access the configuration utility, open a web-browser such as Internet Explorer and enter **http://dlinkrouter.local.**

Windows and Mac users may also connect by typing the IP address of the router (**http://192.168.0.1**) in the address bar.

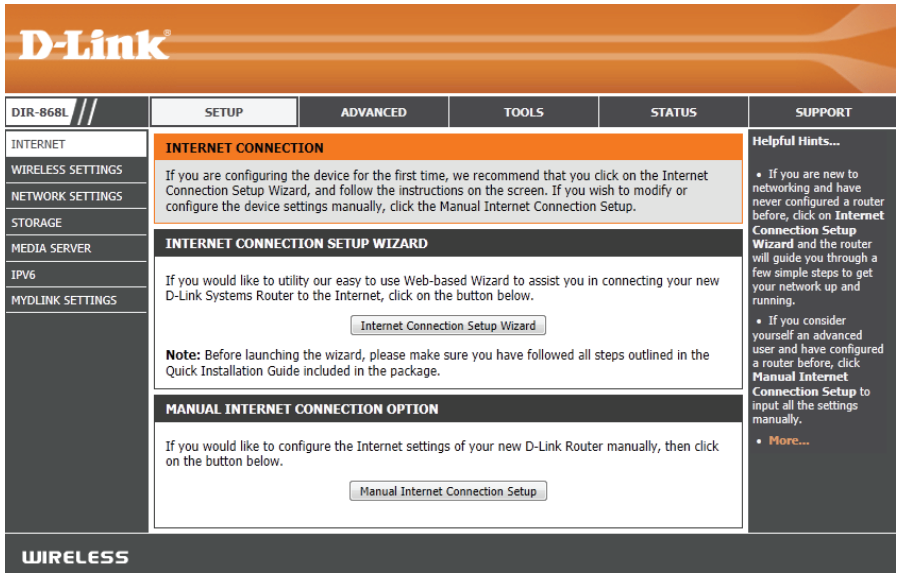


Enter your password. The password should be left blank by default.

Internet Connection Setup

If you want to configure your router to connect to the Internet using the wizard, click **Internet Connection Setup Wizard**. You will be directed to the Quick Setup Wizard. Please refer to page 12.

Click **Manual Internet Connection Setup** to configure your connection manually and continue to the next page.


D-Link
DIR-868L
SETUP
ADVANCED
TOOLS
STATUS
SUPPORT
INTERNET
WIRELESS SETTINGS
NETWORK SETTINGS
STORAGE
MEDIA SERVER
IPV6
MYDLINK SETTINGS
INTERNET CONNECTION
If you are configuring the device for the first time, we recommend that you click on the Internet Connection Setup Wizard, and follow the instructions on the screen. If you wish to modify or configure the device settings manually, click the Manual Internet Connection Setup.
INTERNET CONNECTION SETUP WIZARD
If you would like to utility our easy to use Web-based Wizard to assist you in connecting your new D-Link Systems Router to the Internet, click on the button below.
Internet Connection Setup Wizard
Note: Before launching the wizard, please make sure you have followed all steps outlined in the Quick Installation Guide included in the package.
MANUAL INTERNET CONNECTION OPTION
If you would like to configure the Internet settings of your new D-Link Router manually, then click on the button below.
Manual Internet Connection Setup
Helpful Hints...
• If you are new to networking and have never configured a router before, click on Internet Connection Setup Wizard and the router will guide you through a few simple steps to get your network up and running.
• If you consider yourself an advanced user and have configured a router before, click Manual Internet Connection Setup to input all the settings manually.
• More...
WIRELESS

Manual Internet Setup

Static IP

Select your connection type from the **My Internet Connect Is** drop-down box. Choose Static IP if all of the port's IP information has been provided by your ISP. You will need to enter the IP address, subnet mask, gateway address, and DNS address(es). Each IP address entered in the fields must be in the appropriate IP form, which are four octets separated by a dot (x.x.x.x). The Router will not accept the IP address if it is not in this format.

My Internet Connection Is: Select **Static IP** to manually enter the IP settings supplied by your ISP.

IP Address: Enter the IP address assigned by your ISP.

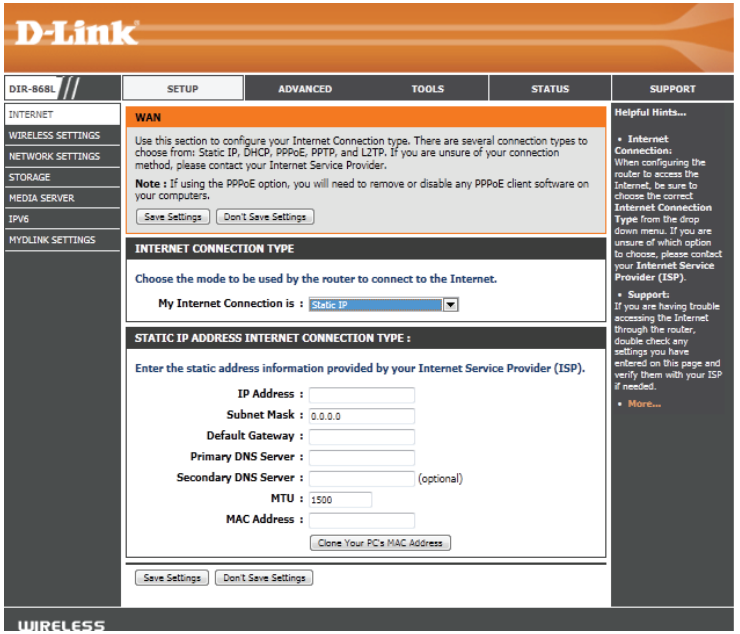
Subnet Mask: Enter the Subnet Mask assigned by your ISP.

Default Gateway: Enter the Gateway assigned by your ISP.

DNS Servers: The DNS server information will be supplied by your ISP

MTU: Maximum Transmission Unit - you may need to change the MTU for optimal performance with your specific ISP. 1500 is the default MTU.

MAC Address: The default MAC address is set to the Internet port's physical interface MAC address on the broadband router. It is not recommended that you change the default MAC address unless required by your ISP. You can use the **Clone Your PC's MAC Address** button to replace the Internet port's MAC address with the MAC address of your Ethernet card.


D-Link
DIR-868L
SETUP
ADVANCED
TOOLS
STATUS
SUPPORT
INTERNET
WIRELESS SETTINGS
NETWORK SETTINGS
STORAGE
MEDIA SERVER
IPV6
MYDLINK SETTINGS
WAN
Use this section to configure your Internet Connection type. There are several connection types to choose from: Static IP, DHCP, PPPoE, PPTP, and L2TP. If you are unsure of your connection method, please contact your Internet Service Provider.
Note : If using the PPPoE option, you will need to remove or disable any PPPoE client software on your computers.
Save Settings
Don't Save Settings
INTERNET CONNECTION TYPE
Choose the mode to be used by the router to connect to the Internet.
My Internet Connection is : Static IP
STATIC IP ADDRESS INTERNET CONNECTION TYPE :
Enter the static address information provided by your Internet Service Provider (ISP).
IP Address :
Subnet Mask : 0.0.0.0
Default Gateway :
Primary DNS Server :
Secondary DNS Server : (optional)
MTU : 1500
MAC Address :
Clone Your PC's MAC Address
Save Settings
Don't Save Settings
Helpful Hints...
Internet Connection:
When configuring the router to access the Internet, be sure to choose the correct Internet Connection Type from the drop down menu. If you are unsure of which option to choose, please contact your Internet Service Provider (ISP).
Support:
If you are having trouble accessing the Internet through the router, double check any settings you have entered on this page and verify them with your ISP if needed.
More...
WIRELESS

Dynamic IP (DHCP)

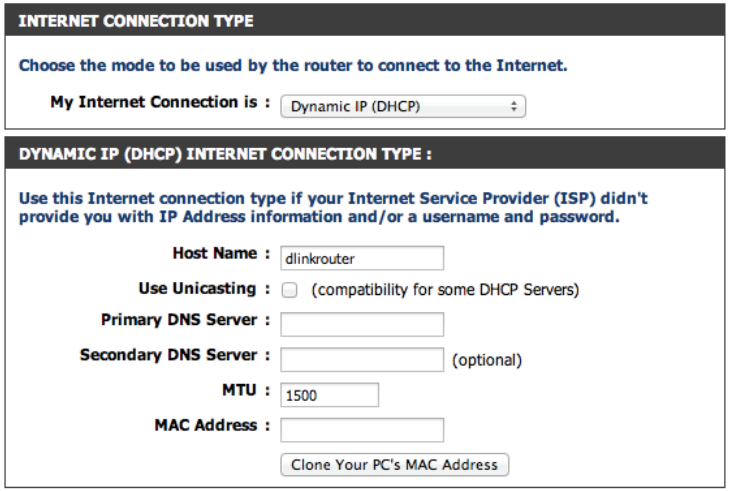
If you are unsure what method you use to connect to the Internet, try this first. Cable modems usually use this type of connection

My Internet Connection: Select **Dynamic IP (DHCP)** to obtain IP Address information automatically from your ISP. Select this option if your ISP does not give you any IP numbers to use. This option is commonly used for cable modem services.

Host Name: The Host Name is optional but may be required by some ISPs. Leave blank if you are not sure.

Use Unicasting: Check the box if you are having problems obtaining an IP address from your ISP.

Primary/Secondary DNS Server: Enter the primary and secondary DNS server IP addresses assigned by your ISP. These addresses are usually obtained automatically from your ISP. Leave at 0.0.0.0 if you did not specifically receive these from your ISP.


INTERNET CONNECTION TYPE
Choose the mode to be used by the router to connect to the Internet.
My Internet Connection is :
Dynamic IP (DHCP)
DYNAMIC IP (DHCP) INTERNET CONNECTION TYPE :
Use this Internet connection type if your Internet Service Provider (ISP) didn't provide you with IP Address information and/or a username and password.
Host Name :
dlinkrouter
Use Unicasting :
(compatibility for some DHCP Servers)
Primary DNS Server :
Secondary DNS Server :
(optional)
MTU :
1500
MAC Address :
Clone Your PC's MAC Address

MTU: Maximum Transmission Unit - you may need to change the MTU for optimal performance with your specific ISP. 1500 is the default MTU.

MAC Address: The default MAC address is set to the Internet port's physical interface MAC address on the broadband router. It is not recommended that you change the default MAC address unless required by your ISP. You can use the **Clone Your PC's MAC Address** button to replace the Internet port's MAC address with the MAC address of your Ethernet card.

PPPoE (Username/Password)

Choose PPPoE (Point to Point Protocol over Ethernet) if your ISP uses a PPPoE connection. Your ISP will provide you with a username and password. This option is typically used for DSL services. Make sure to remove your PPPoE software from your computer. The software is no longer needed and will not work through a router.

My Internet Connection: Select **PPPoE (Username/Password)** from the drop-down menu.

Address Mode: Select **Static IP** if your ISP assigned you the IP address, subnet mask, gateway, and DNS server addresses. In most cases, select **Dynamic**.

IP Address: Enter the IP address (Static PPPoE only).

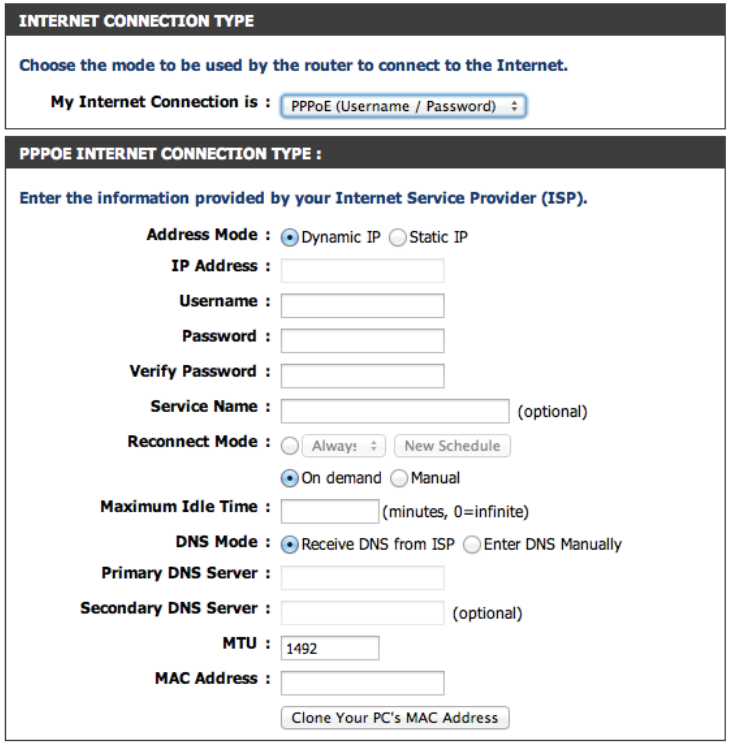
User Name: Enter your PPPoE user name.

Password: Enter your PPPoE password and then retype the password in the next box.

Service Name: Enter the ISP Service Name (optional).

Reconnect Mode: Select either **Always-on**, **On-Demand**, or **Manual**.

Maximum Idle Time: Enter a maximum idle time during which the Internet connection is maintained during inactivity. To disable this feature, enable Auto-reconnect.


INTERNET CONNECTION TYPE
Choose the mode to be used by the router to connect to the Internet.
My Internet Connection is :
PPPoE (Username / Password)
PPPOE INTERNET CONNECTION TYPE :
Enter the information provided by your Internet Service Provider (ISP).
Address Mode : Dynamic IP Static IP
IP Address :
Username :
Password :
Verify Password :
Service Name : (optional)
Reconnect Mode : Always New Schedule
On demand Manual
Maximum Idle Time : (minutes, 0=infinite)
DNS Mode : Receive DNS from ISP Enter DNS Manually
Primary DNS Server :
Secondary DNS Server : (optional)
MTU : 1492
MAC Address :
Clone Your PC's MAC Address

DNS Mode: Select whether to **Receive DNS from ISP** or **Enter DNS Manually**. For Manual, enter the DNS information below.

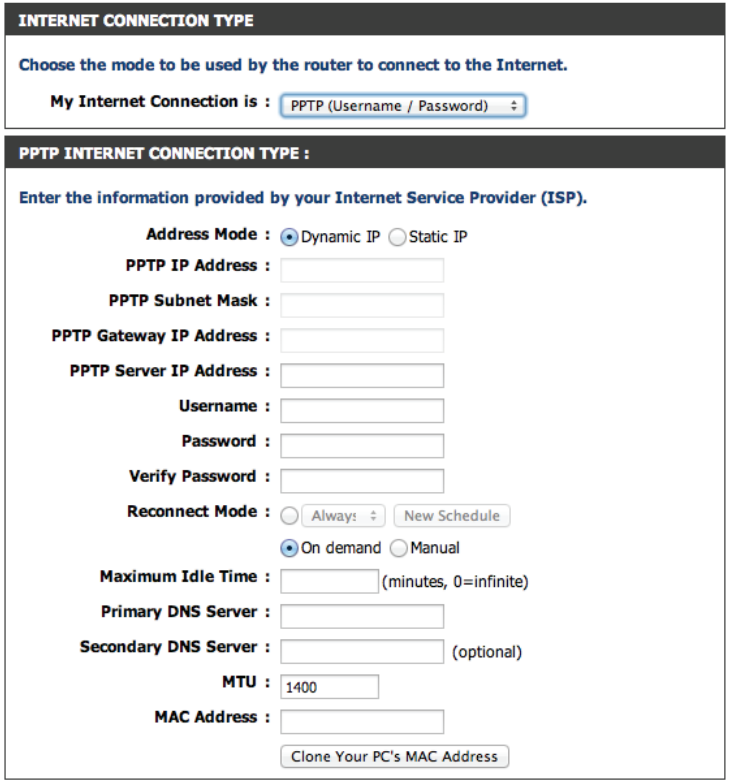
DNS Addresses: Enter the primary and secondary DNS server addresses (Static PPPoE only).

MTU: Maximum Transmission Unit - you may need to change the MTU for optimal performance with your specific ISP. 1492 is the default MTU.

MAC Address: The default MAC address is set to the Internet port's physical interface MAC address on the broadband router. It is not recommended that you change the default MAC address unless required by your ISP. You can use the **Clone Your PC's MAC Address** button to replace the Internet port's MAC address with the MAC address of your Ethernet card.

PPTP

Choose PPTP (Point-to-Point-Tunneling Protocol) if your ISP uses a PPTP connection. Your ISP will provide you with a username and password. This option is typically used for DSL services.



My Internet Connection: Select **PPTP (Username/Password)** from the drop-down menu.

Address Mode: Select **Static IP** if your ISP assigned you the IP address, subnet mask, gateway, and DNS server addresses. In most cases, select **Dynamic IP**.

PPTP IP Address: Enter the IP address (Static PPTP only).

PPTP Subnet Mask: Enter the subnet mask provided by your ISP (Static PPTP only).

PPTP Gateway: Enter the gateway IP Address provided by your ISP.

PPTP Server IP: Enter the server IP provided by your ISP (optional).

Username: Enter your PPTP username.

Password: Enter your PPTP password and then retype the password in the next box.

Reconnect Mode: Select either **Always**, **On-Demand**, or **Manual**. You can also select a schedule for connection.

Maximum Idle Time: Enter a maximum idle time during which the Internet connection is maintained during inactivity. To disable this feature, enable Auto-reconnect.

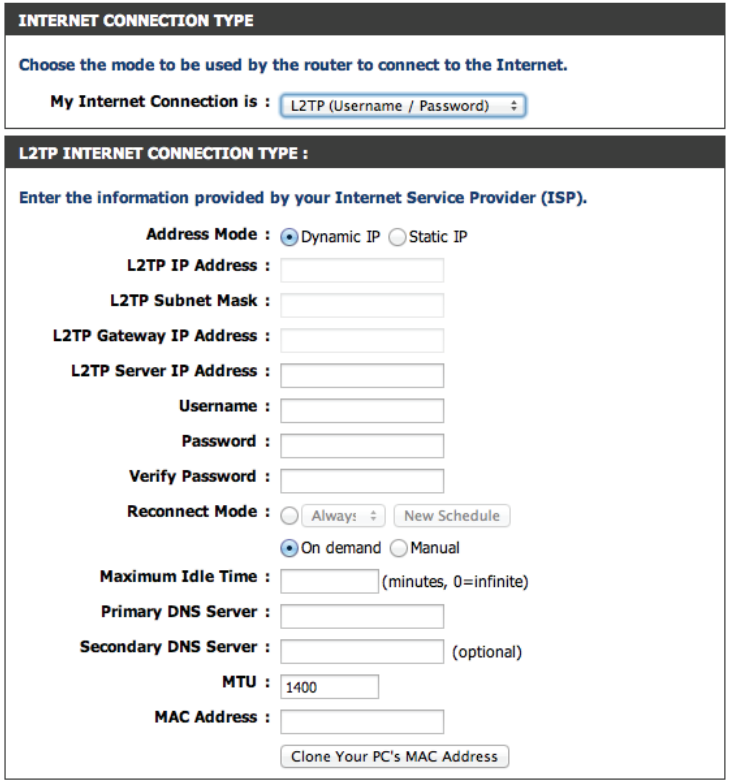
Primary/Secondary DNS Servers: The DNS primary and secondary DNS server information will be supplied by your ISP (Internet Service Provider.)

MTU: Maximum Transmission Unit - you may need to change the MTU for optimal performance with your specific ISP. 1400 is the default MTU.

MAC Address: The default MAC Address is set to the Internet port's physical interface MAC address on the Broadband Router. It is not recommended that you change the default MAC address unless required by your ISP. You can use the **Clone Your PC's MAC Address** button to replace the Internet port's MAC address with the MAC address of your Ethernet card.

L2TP

Choose L2TP (Layer 2 Tunneling Protocol) if your ISP uses a L2TP connection. Your ISP will provide you with a username and password. This option is typically used for DSL services.



My Internet Connection: Select **L2TP (Username/Password)** from the drop-down menu.

Address Mode: Select **Static** if your ISP assigned you the IP address, subnet mask, gateway, and DNS server addresses. In most cases, select **Dynamic**.

PPTP IP Address: Enter the IP address (Static PPTP only).

PPTP Subnet Mask: Enter the primary and secondary DNS Server Addresses (Static PPTP only).

PPTP Gateway: Enter the gateway IP Address provided by your ISP.

PPTP Server IP: Enter the server IP provided by your ISP (optional).

Username: Enter your PPTP username.

Password: Enter your PPTP password and then retype the password in the next box.

Reconnect Mode: Select either **Always**, **On-Demand**, or **Manual**. You can also select a schedule for connection.

Maximum Idle Time: Enter a maximum idle time during which the Internet connection is maintained during inactivity. To disable this feature, enable Auto-reconnect.

Primary/Secondary DNS Servers: The DNS primary and secondary DNS server information will be supplied by your ISP (Internet Service Provider.)

MTU: Maximum Transmission Unit - you may need to change the MTU for optimal performance with your specific ISP. 1400 is the default MTU.

MAC Address: The default MAC Address is set to the Internet port's physical interface MAC address on the Broadband Router. It is not recommended that you change the default MAC address unless required by your ISP. You can use the **Clone Your PC's MAC Address** button to replace the Internet port's MAC address with the MAC address of your Ethernet card.

DS-Lite

DS-Lite is an IPv6 connection type. After selecting DS-Lite, the following parameters will be available for configuration:

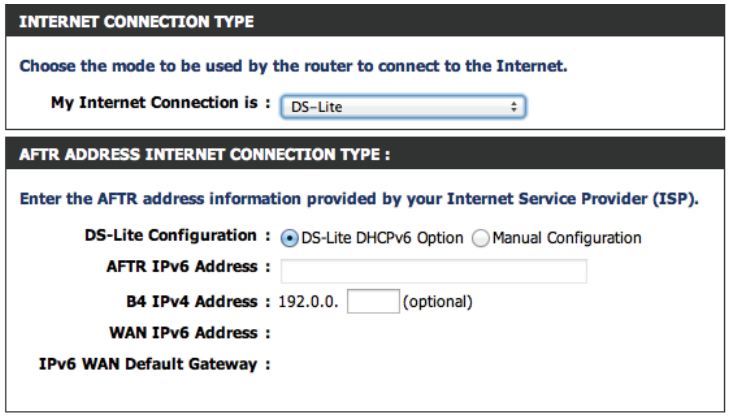
DS-Lite Configuration: Select the DS-Lite DHCPv6 option to let the router allocate the AFTR IPv6 address automatically. Select the Manual Configuration to enter the AFTR IPv6 address in manually.

AFTR IPv6 Address: After selecting the Manual Configuration option above, enter the AFTR IPv6 address used here.

B4 IPv4 Address: Enter the B4 IPv4 address value used here.

WAN IPv6 Address: Once connected, the WAN IPv6 address will be displayed here.

IPv6 WAN Default Gateway: Once connected, the IPv6 WAN Default Gateway address will be displayed here.

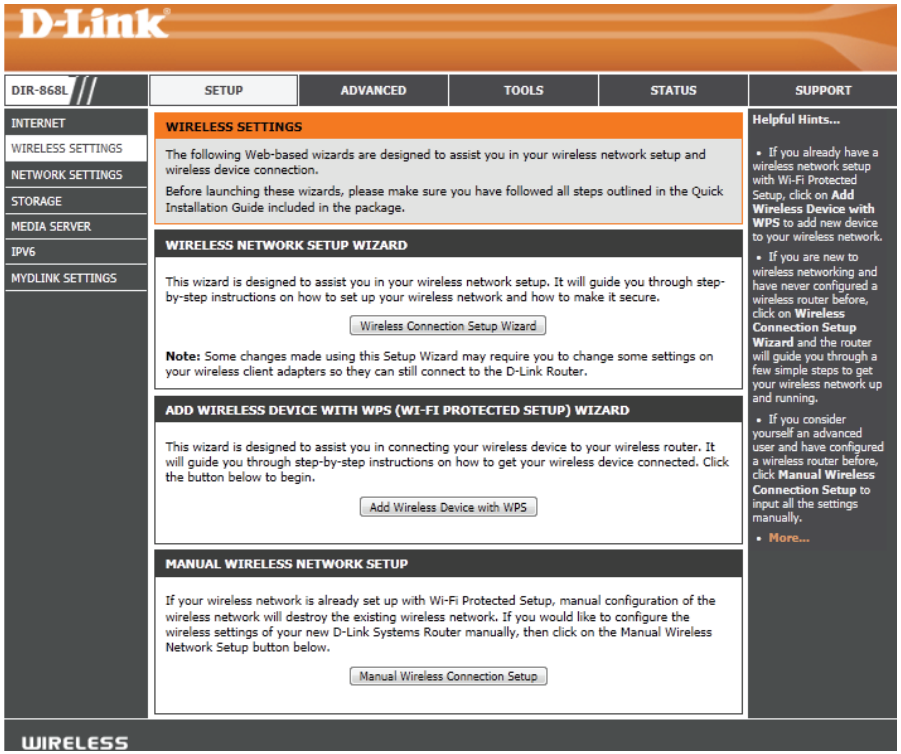

INTERNET CONNECTION TYPE
Choose the mode to be used by the router to connect to the Internet.
My Internet Connection is :
DS-Lite
AFTR ADDRESS INTERNET CONNECTION TYPE :
Enter the AFTR address information provided by your Internet Service Provider (ISP).
DS-Lite Configuration :
DS-Lite DHCPv6 Option
Manual Configuration
AFTR IPv6 Address :
B4 IPv4 Address :
192.0.0.
(optional)
WAN IPv6 Address :
IPv6 WAN Default Gateway :

Wireless Settings

If you want to configure the wireless settings on your router using the wizard, click **Wireless Network Setup Wizard** and refer to page 42.

Click **Add Wireless Device with WPS** if you want to add a wireless device using Wi-Fi Protected Setup (WPS) and refer to page 44.

If you want to manually configure the wireless settings on your router click **Manual Wireless Connection Setup** and refer to the next page.


D-Link
DIR-868L
SETUP
ADVANCED
TOOLS
STATUS
SUPPORT
INTERNET
WIRELESS SETTINGS
NETWORK SETTINGS
STORAGE
MEDIA SERVER
IPV6
MYDLINK SETTINGS
WIRELESS SETTINGS
The following Web-based wizards are designed to assist you in your wireless network setup and wireless device connection.
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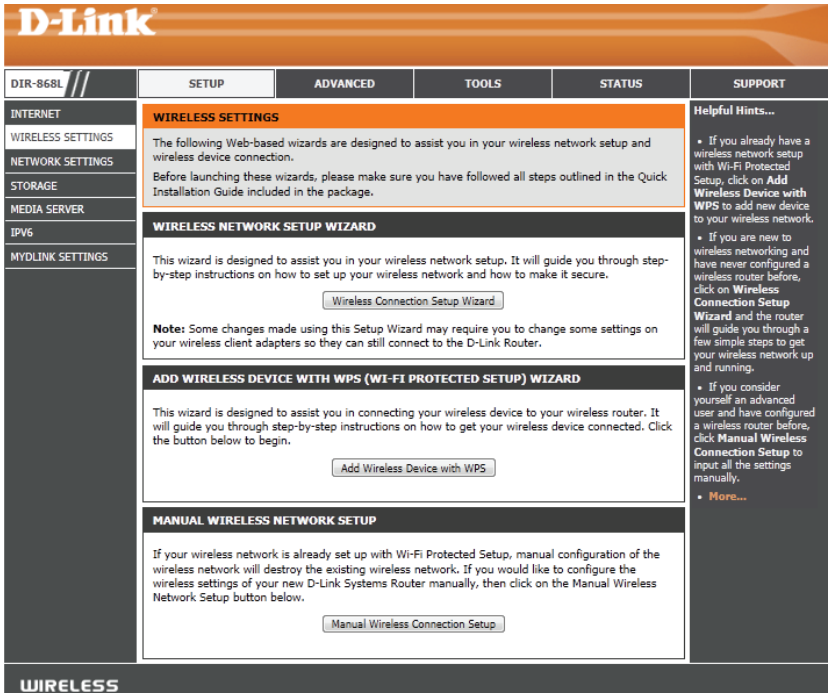
WIRELESS NETWORK SETUP WIZARD
This wizard is designed to assist you in your wireless network setup. It will guide you through step-by-step instructions on how to set up your wireless network and how to make it secure.
Wireless Connection Setup Wizard
Note: Some changes made using this Setup Wizard may require you to change some settings on your wireless client adapters so they can still connect to the D-Link Router.
ADD WIRELESS DEVICE WITH WPS (WI-FI PROTECTED SETUP) WIZARD
This wizard is designed to assist you in connecting your wireless device to your wireless router. It will guide you through step-by-step instructions on how to get your wireless device connected. Click the button below to begin.
Add Wireless Device with WPS
MANUAL WIRELESS NETWORK SETUP
If your wireless network is already set up with Wi-Fi Protected Setup, manual configuration of the wireless network will destroy the existing wireless network. If you would like to configure the wireless settings of your new D-Link Systems Router manually, then click on the Manual Wireless Network Setup button below.
Manual Wireless Connection Setup
Helpful Hints...
• If you already have a wireless network setup with Wi-Fi Protected Setup, click on Add Wireless Device with WPS to add new device to your wireless network.
• If you are new to wireless networking and have never configured a wireless router before, click on Wireless Connection Setup Wizard and the router will guide you through a few simple steps to get your wireless network up and running.
• If you consider yourself an advanced user and have configured a wireless router before, click Manual Wireless Connection Setup to input all the settings manually.
• More...
WIRELESS

Wireless Connection Setup Wizard

To run the security wizard, click on Setup at the top and then click **Wireless Connection Setup Wizard**.


D-Link
DIR-868L
SETUP
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Wireless Connection Setup Wizard
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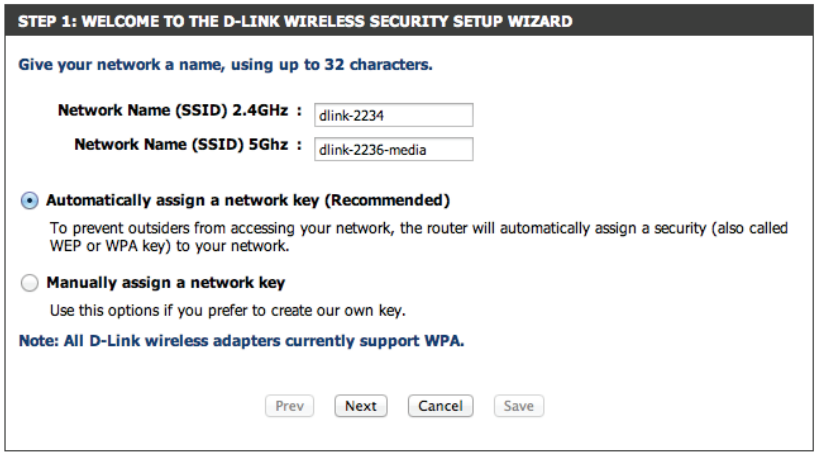
Add Wireless Device with WPS
MANUAL WIRELESS NETWORK SETUP
If your wireless network is already set up with Wi-Fi Protected Setup, manual configuration of the wireless network will destroy the existing wireless network. If you would like to configure the wireless settings of your new D-Link Systems Router manually, then click on the Manual Wireless Network Setup button below.
Manual Wireless Connection Setup
Helpful Hints...
• If you already have a wireless network setup with Wi-Fi Protected Setup, click on Add Wireless Device with WPS to add new device to your wireless network.
• If you are new to wireless networking and have never configured a wireless router before, click on Wireless Connection Setup Wizard and the router will guide you through a few simple steps to get your wireless network up and running.
• If you consider yourself an advanced user and have configured a wireless router before, click Manual Wireless Connection Setup to input all the settings manually.
• More...
WIRELESS

STEP 1: Type your desired wireless network names (SSIDs) for both the 2.4 GHz band and the 5 GHz band.

Automatically: Select this option to automatically generate the router's network key and click **Next**.

Manually: Select this option to manually enter your network key and click **Next**.

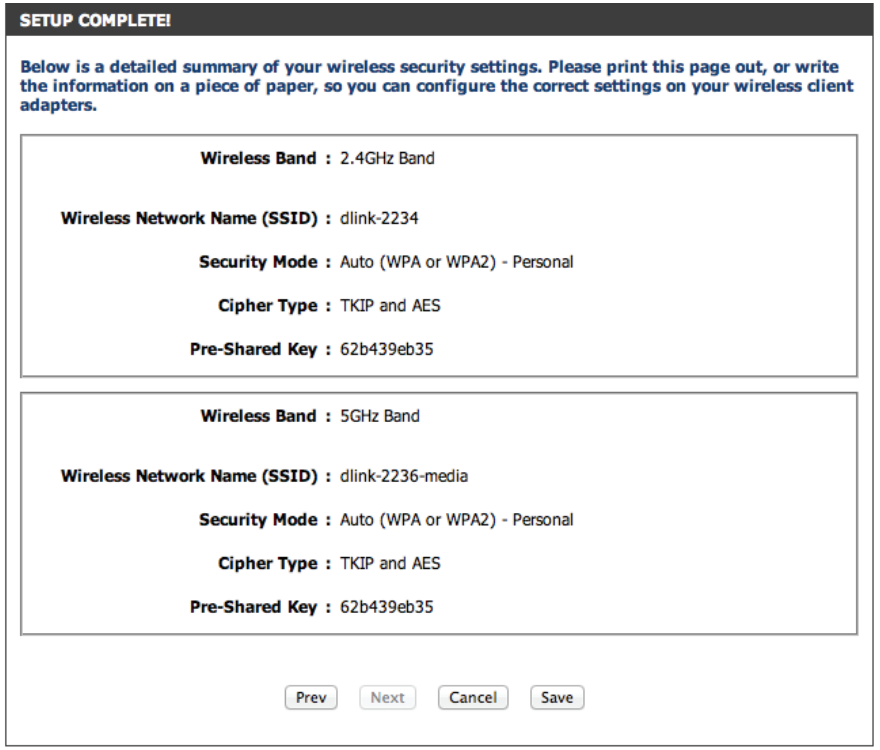

STEP 1: WELCOME TO THE D-LINK WIRELESS SECURITY SETUP WIZARD
Give your network a name, using up to 32 characters.
Network Name (SSID) 2.4GHz : dlink-2234
Network Name (SSID) 5Ghz : dlink-2236-media
Automatically assign a network key (Recommended)
To prevent outsiders from accessing your network, the router will automatically assign a security (also called WEP or WPA key) to your network.
Manually assign a network key
Use this options if you prefer to create our own key.
Note: All D-Link wireless adapters currently support WPA.
Prev
Next
Cancel
Save

If you selected **Automatically**, the option to make your password the same on both bands with be offered. If you choose to make them the same, you can select your own password in the box below.

Click **Next**.

You will now see a summary window that displays your settings. Write down the security key and enter this on your wireless clients.

Click **Save** to save your settings.


SETUP COMPLETE!
Below is a detailed summary of your wireless security settings. Please print this page out, or write the information on a piece of paper, so you can configure the correct settings on your wireless client adapters.
Wireless Band : 2.4GHz Band
Wireless Network Name (SSID) : dlink-2234
Security Mode : Auto (WPA or WPA2) - Personal
Cipher Type : TKIP and AES
Pre-Shared Key : 62b439eb35
Wireless Band : 5GHz Band
Wireless Network Name (SSID) : dlink-2236-media
Security Mode : Auto (WPA or WPA2) - Personal
Cipher Type : TKIP and AES
Pre-Shared Key : 62b439eb35
Prev
Next
Cancel
Save

If you selected **Manually**, the option to make your password the same on both bands with be offered.

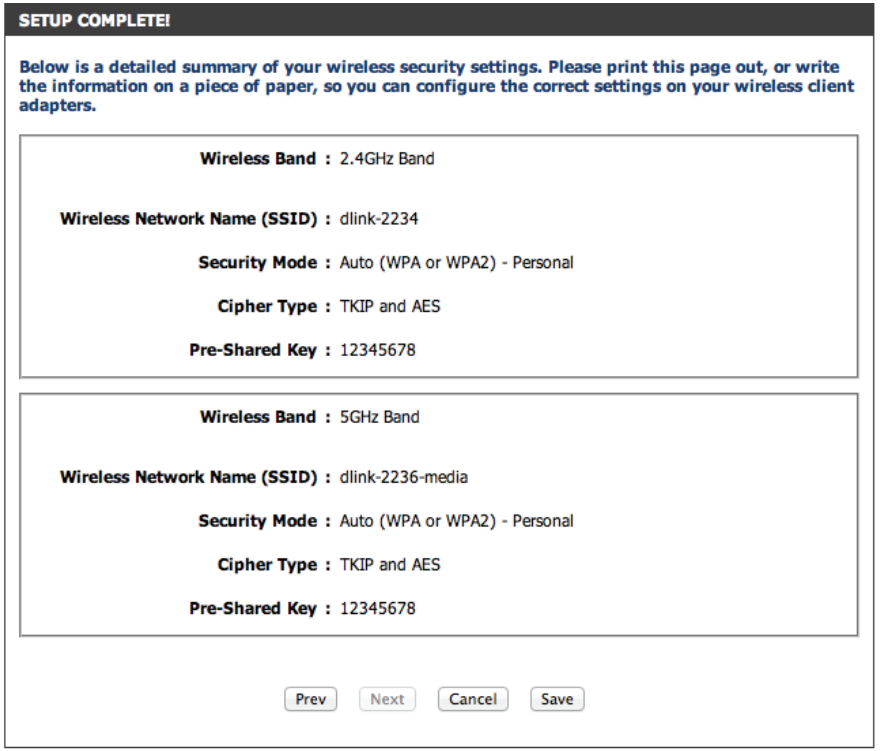
Enter your wireless password in the box below.

Click **Next**.

STEP 2: SET YOUR WIRELESS SECURITY PASSWORD
You have selected your security level - you will need to set a wireless security password.
The WPA (Wi-Fi Protected Access) key must meet one of following guidelines:
- Between 8 and 63 characters (A longer WPA key is more secure than a short one)
- Exactly 64 characters using 0-9 and A-F
Use the same Wireless Security Password on both 2.4GHz and 5GHz band
Wireless Security Password :
Note: You will need to enter the same password as keys in this step into your wireless clients in order to enable proper wireless communication.
Prev
Next
Cancel
Save

You will now see a summary window that displays your settings. Write down the security key and enter this on your wireless clients.

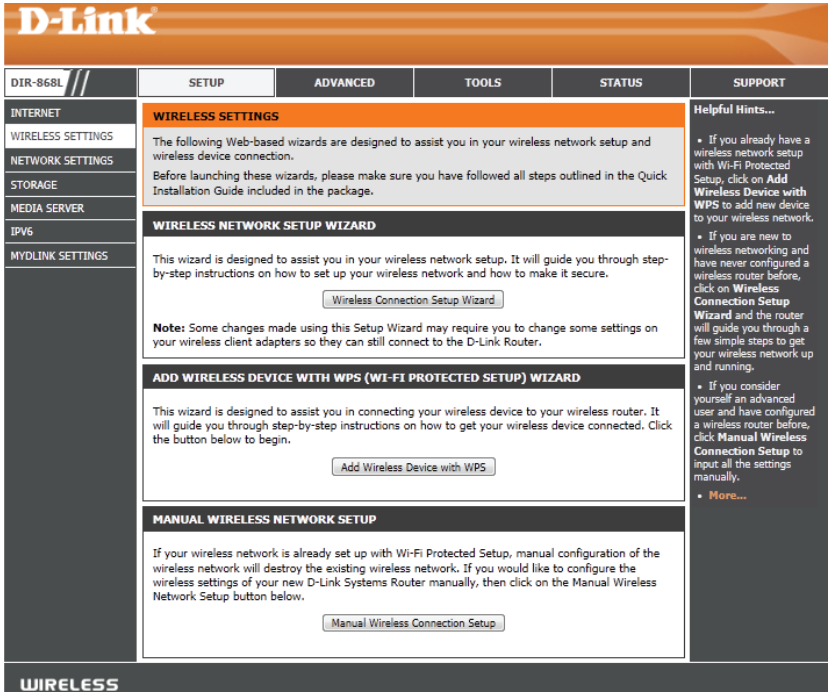
Click **Save** to save your settings.


SETUP COMPLETE!
Below is a detailed summary of your wireless security settings. Please print this page out, or write the information on a piece of paper, so you can configure the correct settings on your wireless client adapters.
Wireless Band : 2.4GHz Band
Wireless Network Name (SSID) : dlink-2234
Security Mode : Auto (WPA or WPA2) - Personal
Cipher Type : TKIP and AES
Pre-Shared Key : 12345678
Wireless Band : 5GHz Band
Wireless Network Name (SSID) : dlink-2236-media
Security Mode : Auto (WPA or WPA2) - Personal
Cipher Type : TKIP and AES
Pre-Shared Key : 12345678
Prev
Next
Cancel
Save

Wireless Security Setup Wizard

If you are unfamiliar with the types of wireless security, more information is located in the appendix at back of this manual.

To run the security wizard, click on Setup at the top and then click **Wireless Network Setup Wizard**.


D-Link
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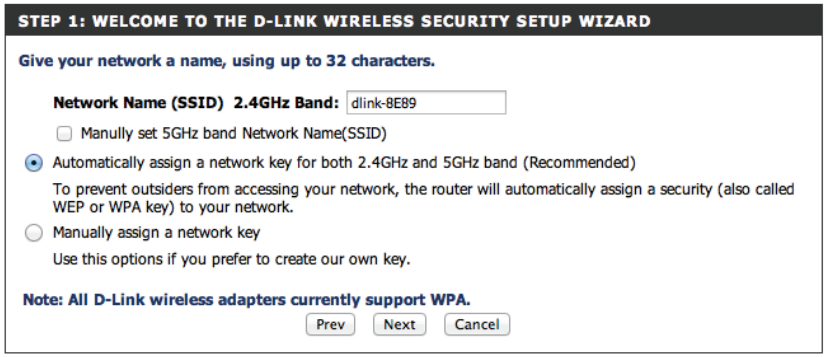
Before launching these wizards, please make sure you have followed all steps outlined in the Quick Installation Guide included in the package.
WIRELESS NETWORK SETUP WIZARD
This wizard is designed to assist you in your wireless network setup. It will guide you through step-by-step instructions on how to set up your wireless network and how to make it secure.
Wireless Connection Setup Wizard
Note: Some changes made using this Setup Wizard may require you to change some settings on your wireless client adapters so they can still connect to the D-Link Router.
ADD WIRELESS DEVICE WITH WPS (WI-FI PROTECTED SETUP) WIZARD
This wizard is designed to assist you in connecting your wireless device to your wireless router. It will guide you through step-by-step instructions on how to get your wireless device connected. Click the button below to begin.
Add Wireless Device with WPS
MANUAL WIRELESS NETWORK SETUP
If your wireless network is already set up with Wi-Fi Protected Setup, manual configuration of the wireless network will destroy the existing wireless network. If you would like to configure the wireless settings of your new D-Link Systems Router manually, then click on the Manual Wireless Network Setup button below.
Manual Wireless Connection Setup
Helpful Hints...
• If you already have a wireless network setup with Wi-Fi Protected Setup, click on Add Wireless Device with WPS to add new device to your wireless network.
• If you are new to wireless networking and have never configured a wireless router before, click on Wireless Connection Setup Wizard and the router will guide you through a few simple steps to get your wireless network up and running.
• If you consider yourself an advanced user and have configured a wireless router before, click Manual Wireless Connection Setup to input all the settings manually.
• More...
WIRELESS

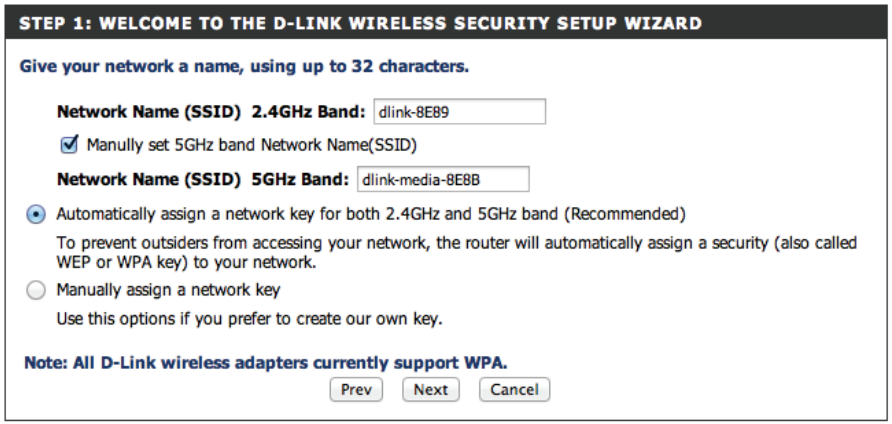
Type your desired wireless network name (SSID).

Automatically: Select this option to automatically generate the router's network key and click **Next**.

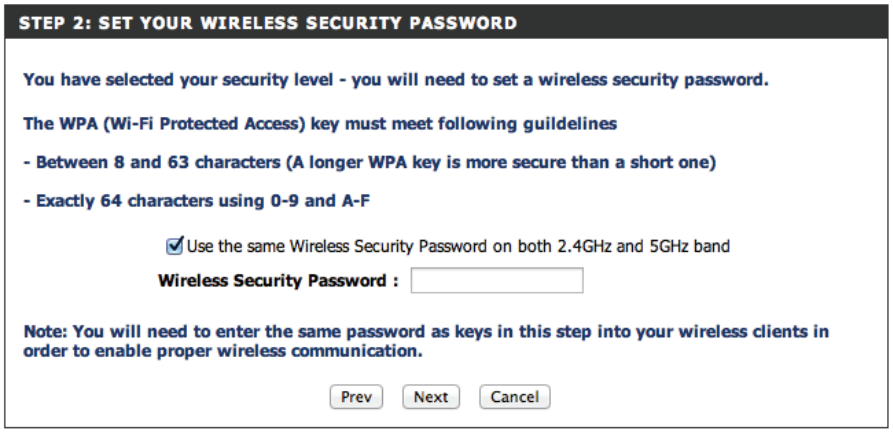
Manually: Select this option to manually enter your network key and click **Next**.


STEP 1: WELCOME TO THE D-LINK WIRELESS SECURITY SETUP WIZARD
Give your network a name, using up to 32 characters.
Network Name (SSID) 2.4GHz Band: dlink-8E89
Manully set 5GHz band Network Name(SSID)
Automatically assign a network key for both 2.4GHz and 5GHz band (Recommended)
To prevent outsiders from accessing your network, the router will automatically assign a security (also called WEP or WPA key) to your network.
Manually assign a network key
Use this options if you prefer to create our own key.
Note: All D-Link wireless adapters currently support WPA.
Prev
Next
Cancel

If you selected **Automatically**, the summary window will display your settings. Write down the security key and enter this on your wireless clients. Click **Save** to save your settings.


STEP 1: WELCOME TO THE D-LINK WIRELESS SECURITY SETUP WIZARD
Give your network a name, using up to 32 characters.
Network Name (SSID) 2.4GHz Band: dlink-8E89
Manully set 5GHz band Network Name(SSID)
Network Name (SSID) 5GHz Band: dlink-media-8E8B
Automatically assign a network key for both 2.4GHz and 5GHz band (Recommended)
To prevent outsiders from accessing your network, the router will automatically assign a security (also called WEP or WPA key) to your network.
Manually assign a network key
Use this options if you prefer to create our own key.
Note: All D-Link wireless adapters currently support WPA.
Prev
Next
Cancel

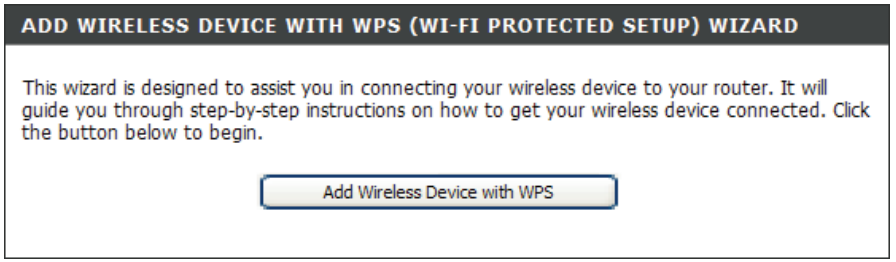
If you selected **Manually**, the following screen will appear. Create a passphrase for your security password. Click **Next** to continue.


STEP 2: SET YOUR WIRELESS SECURITY PASSWORD
You have selected your security level - you will need to set a wireless security password.
The WPA (Wi-Fi Protected Access) key must meet following guildelines
- Between 8 and 63 characters (A longer WPA key is more secure than a short one)
- Exactly 64 characters using 0-9 and A-F
Use the same Wireless Security Password on both 2.4GHz and 5GHz band
Wireless Security Password :
Note: You will need to enter the same password as keys in this step into your wireless clients in order to enable proper wireless communication.
Prev
Next
Cancel

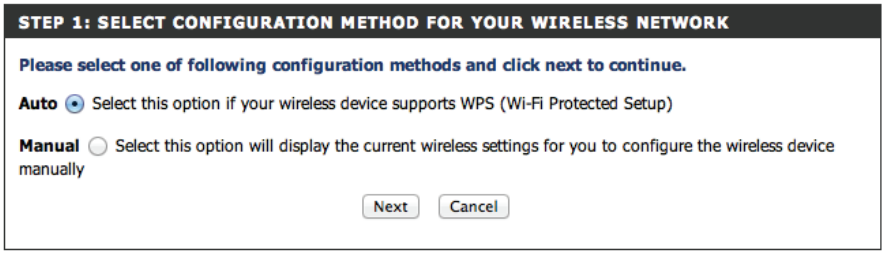
Add Wireless Device with WPS Wizard

If you are unfamiliar with the types of wireless security, more information is located in the appendix at back of this manual.

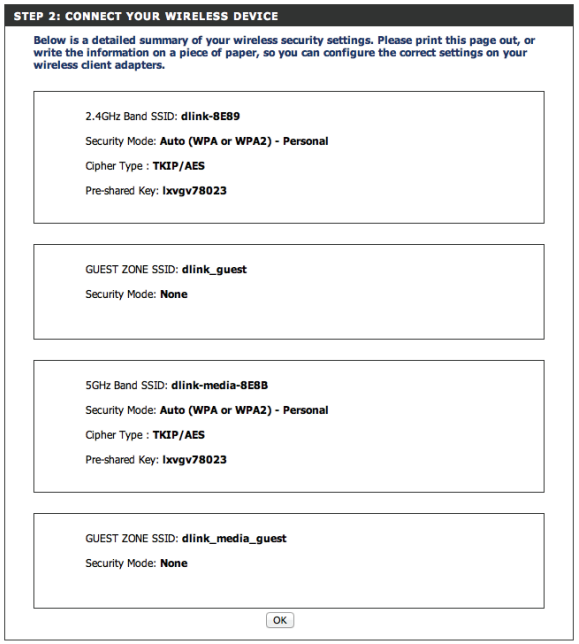
From the **Setup** > **Wireless Settings** screen, click **Add Wireless Device with WPS**.


ADD WIRELESS DEVICE WITH WPS (WI-FI PROTECTED SETUP) WIZARD
This wizard is designed to assist you in connecting your wireless device to your router. It will guide you through step-by-step instructions on how to get your wireless device connected. Click the button below to begin.
Add Wireless Device with WPS

Select **Auto** to add a wireless client using WPS (Wi-Fi Protected Setup) and then click **Next**. Skip to the next page.

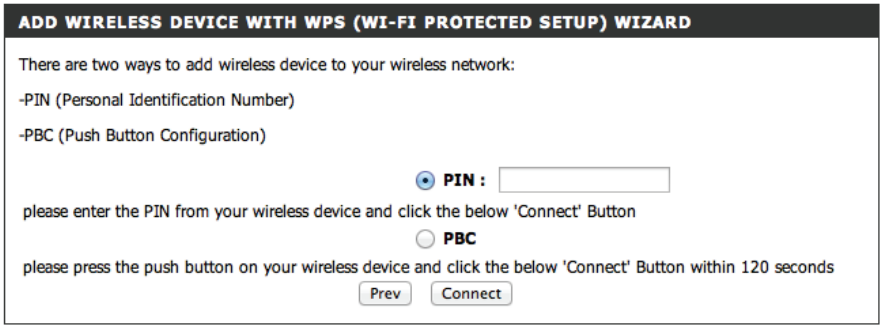

STEP 1: SELECT CONFIGURATION METHOD FOR YOUR WIRELESS NETWORK
Please select one of following configuration methods and click next to continue.
Auto Select this option if your wireless device supports WPS (Wi-Fi Protected Setup)
Manual Select this option will display the current wireless settings for you to configure the wireless device manually
Next
Cancel

If you select **Manual**, a settings summary screen will appear. Write down the security key and enter this on your wireless clients. Click **OK** to finish.

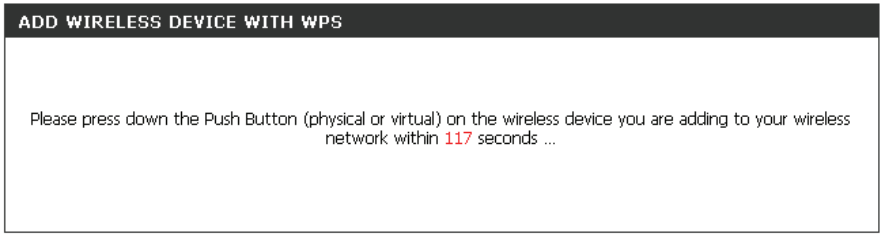

STEP 2: CONNECT YOUR WIRELESS DEVICE
Below is a detailed summary of your wireless security settings. Please print this page out, or write the information on a piece of paper, so you can configure the correct settings on your wireless client adapters.
2.4GHz Band SSID: dlink-8E89
Security Mode: Auto (WPA or WPA2) - Personal
Cipher Type : TKIP/AES
Pre-shared Key: lxvgv78023
GUEST ZONE SSID: dlink_guest
Security Mode: None
5GHz Band SSID: dlink-media-8E8B
Security Mode: Auto (WPA or WPA2) - Personal
Cipher Type : TKIP/AES
Pre-shared Key: lxvgv78023
GUEST ZONE SSID: dlink_media_guest
Security Mode: None
OK

PIN: Select this option to use PIN method. In order to use this method you must know the wireless client's 8 digit PIN and click **Connect**.

PBC: Select this option to use PBC (Push Button) method to add a wireless client. Click **Connect**.


ADD WIRELESS DEVICE WITH WPS (WI-FI PROTECTED SETUP) WIZARD
There are two ways to add wireless device to your wireless network:
-PIN (Personal Identification Number)
-PBC (Push Button Configuration)
PIN :
please enter the PIN from your wireless device and click the below 'Connect' Button
PBC
please press the push button on your wireless device and click the below 'Connect' Button within 120 seconds
Prev
Connect

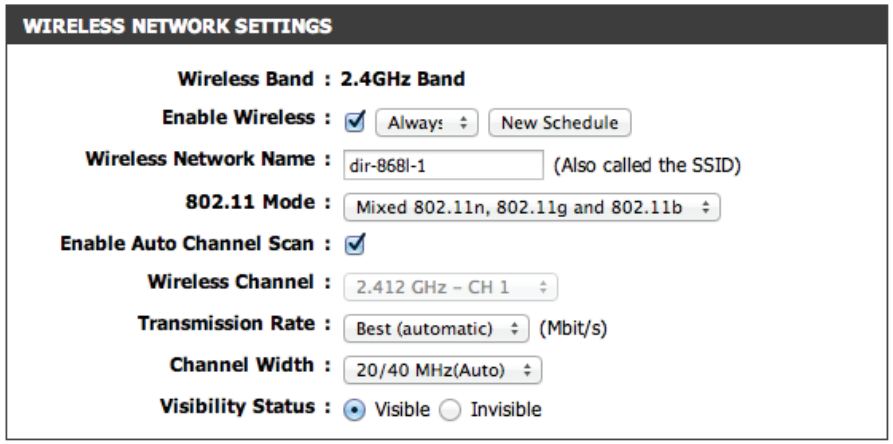
Once you click **Connect**, you will have a 120 second time limit to apply the settings to your wireless client(s) and successfully establish a connection.


ADD WIRELESS DEVICE WITH WPS
Please press down the Push Button (physical or virtual) on the wireless device you are adding to your wireless network within 117 seconds ...

Manual Wireless Settings

802.11 b/g/n (2.4 GHz)

If you are unfamiliar with the types of wireless security, more information is located in the appendix at back of this manual.



Enable Wireless: Check the box to enable the wireless function. If you do not want to use wireless, uncheck the box to disable all the wireless functions.

Schedule: Select the time frame that you would like your wireless network enabled. The schedule may be set to Always. Any schedule you create will be available in the drop-down menu. Click New Schedule to create a schedule.

Wireless Network Name: Service Set Identifier (SSID) is the name of your wireless network. Create a name for your wireless network using up to 32 characters. The SSID is case-sensitive.

802.11 Mode: Select one of the following:
802.11b Only - Select only if all of your wireless clients are 802.11b.
802.11g Only - Select only if all of your wireless clients are 802.11g.
802.11n Only - Select only if all of your wireless clients are 802.11n.
Mixed 802.11g and 802.11b - Select if you are using both 802.11g and 802.11b wireless clients.
Mixed 802.11n and 802.11g - Select if you are using both 802.11n and 802.11g wireless clients.
Mixed 802.11n, 802.11g, and 802.11b - Select if you are using a mix of 802.11n, 802.11g, and 802.11b wireless clients.

Enable Auto Channel Scan: The Auto Channel Scan setting can be selected to allow the DIR-868L to choose the channel with the least amount of interference.

Wireless Channel: Indicates the channel setting for the DIR-868L. By default the channel is set to 6. The Channel can be changed to fit the channel setting for an existing wireless network or to customize the wireless network. If you enable Auto Channel Scan, this option will be greyed out.

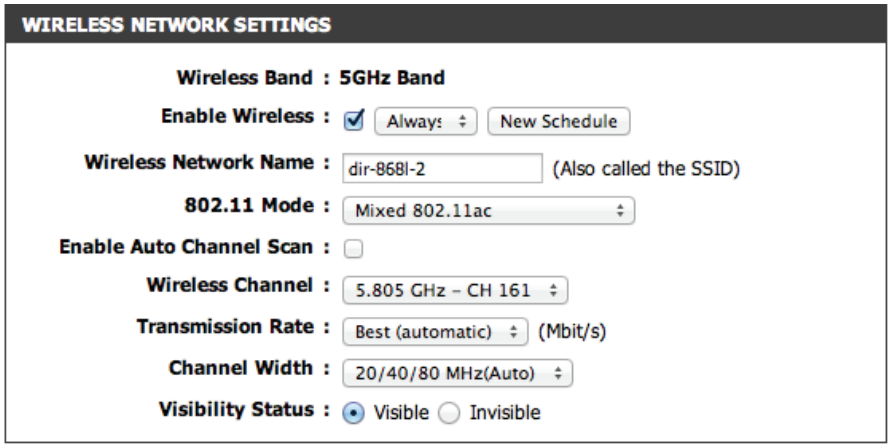
Transmission Rate: This should be set to **Best (automatic)** for optimal performance.

Channel Width: Select the Channel Width:
Auto 20/40 - This is the default setting. Select if you are using both 802.11n and non-802.11n wireless devices.
20 MHz - Select if you are not using any 802.11n wireless clients.

Visibility Status: Select Invisible if you do not want the SSID of your wireless network to be broadcast by the DIR-868L. If Invisible is selected, the SSID of the DIR-868L will not be seen by Site Survey utilities so your wireless clients will have to know the SSID of your DIR-868L in order to connect to it.

Wireless Security: Refer to the "Wireless Security" on page <OV> for more information regarding wireless security.

802.11ac draft (5 GHz)



Enable Wireless: Check the box to enable the wireless function. If you do not want to use wireless, uncheck the box to disable all the wireless functions.

Schedule: Select the time frame that you would like your wireless network enabled. The schedule may be set to Always. Any schedule you create will be available in the drop-down menu. Click New Schedule to create a schedule.

Wireless Network Name: Service Set Identifier (SSID) is the name of your wireless network. Create a name for your wireless network using up to 32 characters. The SSID is case-sensitive.

802.11 Mode: Select one of the following:
802.11n Only - Select only if all of your wireless clients are 802.11n.
802.11ac Only - Select if all of your wireless clients are 802.11ac.
Mixed 802.11a and 802.11n - Select if you are using both 802.11n and 802.11a wireless clients.
Mixed 802.11ac and 802.11n - Select if you are using both 802.11ac and 802.11n wireless clients.
Mixed 802.11ac, 802.11n, and 802.11a - Select if you are using 802.11ac, 802.11n, and 802.11a wireless clients.

Enable Auto Channel Scan: The Auto Channel Scan setting can be selected to allow the DIR-868L to choose the channel with the least amount of interference.

Wireless Channel: Indicates the channel setting for the DIR-868L. By default the channel is set to 6. The Channel can be changed to fit the channel setting for an existing wireless network or to customize the wireless network. If you enable Auto Channel Scan, this option will be greyed out.

Transmission Rate: This should be set to **Best (automatic)** for optimal performance.

Channel Width: Select the Channel Width:
Auto 20/40/80 - Select if you are using both 802.11ac, 802.11n and non-802.11n wireless devices.
Auto 20/40 - This is the default setting. Select if you are using both 802.11n and non-802.11n wireless devices.
20 MHz - Select if you are not using any 802.11n wireless clients.

Visibility Status: Select Invisible if you do not want the SSID of your wireless network to be broadcasted by the DIR-868L. If Invisible is selected, the SSID of the DIR-868L will not be seen by Site Survey utilities so your wireless clients will have to know the SSID of your DIR-868L in order to connect to it.

Wireless Security: Refer to the "Wireless Security" on page <OV> for more information regarding wireless security.

Wireless Security

By default the wireless security of this router will be disabled. In this option the user can enable or disable wireless security for the 2.4 GHz and 5 GHz frequency bands. There are two types of encryption that can be used: WEP or WPA/WPA2.

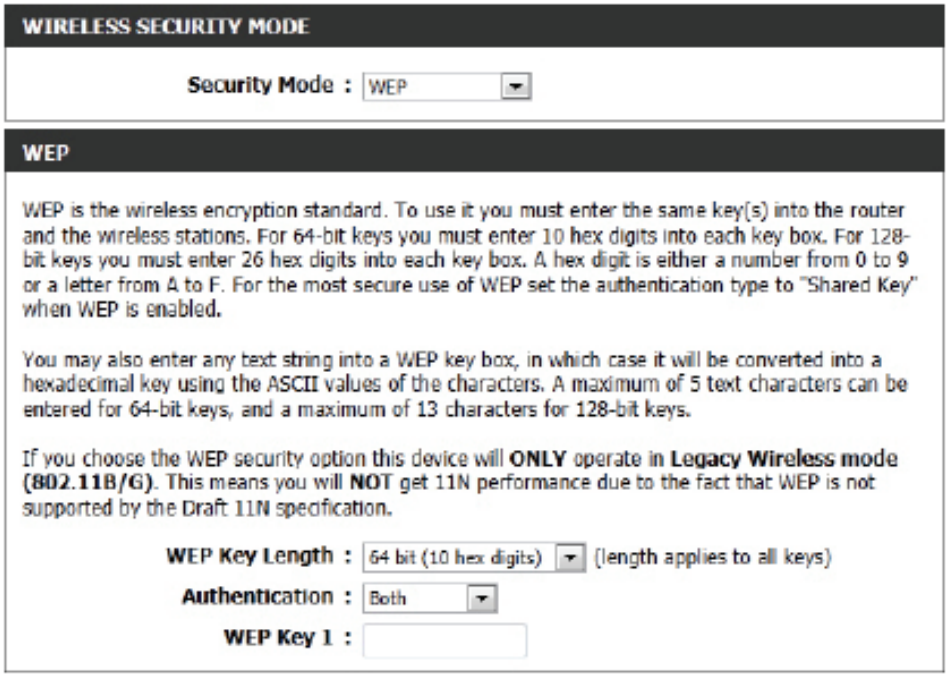
Wireless Security Mode: WEP

Wired Equivalent Privacy (WEP) is the most basic form of encryption that can be used for wireless networks. WEP is considered to be a relatively weak security method, however it provides more protection than an unsecured network. Older wireless adapters may only support WEP encryption. It is recommended that this method is used only if your wireless clients do not support WPA.

The following parameters will be available for configuration:

WEP Key Length: Here the user can specify to either use a 64-Bit or a 128-Bit encrypted key.

Authentication: Authentication is a process by which the router verifies the identity of a network device that is attempting to join the wireless network. There are two types authentication for this device when using WEP. **Open System** allows all wireless devices to communicate with the router before they are required to provide the encryption key needed to gain access to the network. **Shared Key** requires any wireless device attempting to communicate with the router to provide the encryption key needed to access the network before they are allowed to communicate with the router.


WIRELESS SECURITY MODE
Security Mode : WEP
WEP
WEP is the wireless encryption standard. To use it you must enter the same key(s) into the router and the wireless stations. For 64-bit keys you must enter 10 hex digits into each key box. For 128-bit keys you must enter 26 hex digits into each key box. A hex digit is either a number from 0 to 9 or a letter from A to F. For the most secure use of WEP set the authentication type to "Shared Key" when WEP is enabled.
You may also enter any text string into a WEP key box, in which case it will be converted into a hexadecimal key using the ASCII values of the characters. A maximum of 5 text characters can be entered for 64-bit keys, and a maximum of 13 characters for 128-bit keys.
If you choose the WEP security option this device will ONLY operate in Legacy Wireless mode (802.11B/G). This means you will NOT get 11N performance due to the fact that WEP is not supported by the Draft 11N specification.
WEP Key Length : 64 bit (10 hex digits) (length applies to all keys)
Authentication : Both
WEP Key 1 :

WEP Key 1: Enter the WEP key used here. For 64-bit keys you must enter 10 hex digits into each key box. For 128-bit keys you must enter 26 hex digits into each key box. A hex digit is either a number from 0 to 9 or a letter from A to F. You may also enter any text string into a WEP key box, in which case it will be converted into a hexadecimal key using the ASCII values of the characters. A maximum of 5 text characters can be entered for 64-bit keys, and a maximum of 13 characters for 128-bit keys.

Wireless Security Mode: WPA-Personal

Wi-Fi Protected Access (WPA) is the most advanced wireless encryption method used today. This is the recommended wireless security option. WPA supports two authentication frameworks. Personal (PSK) and Enterprise (EAP). Personal requires only the use of a passphrase (Pre-Shared Key) for security.

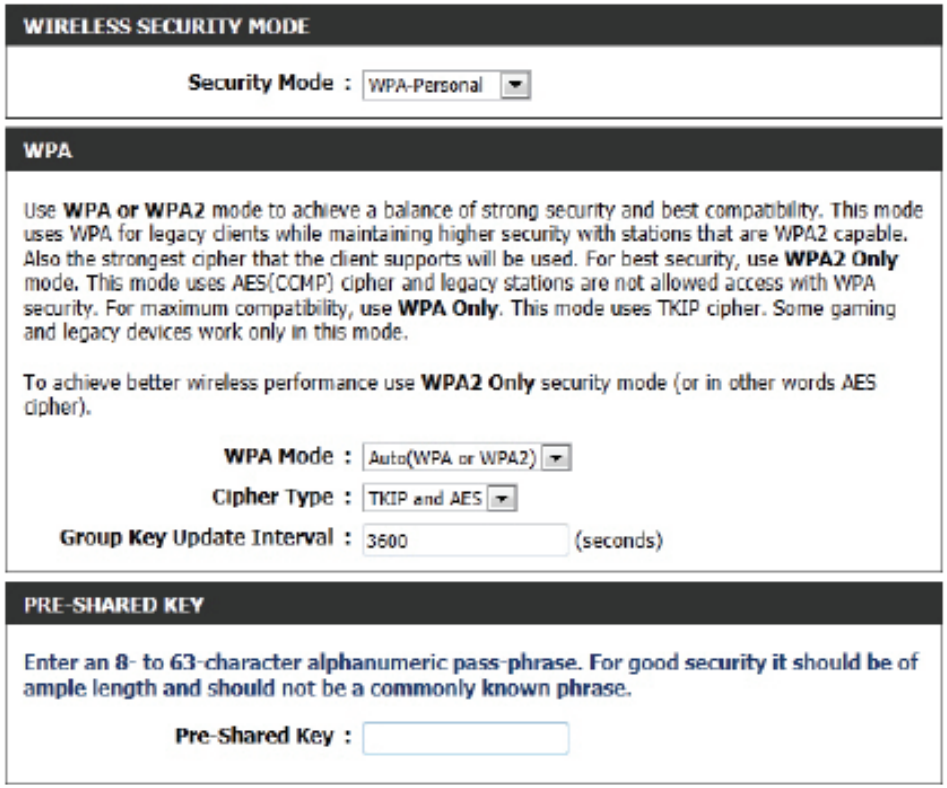
The following parameters will be available for configuration:

WPA Mode: WPA is the older standard; select this option if the clients that will be used with the router only support the older standard. WPA2 is the newer implementation of the stronger IEEE 802.11i security standard. With the WPA2 option, the router tries WPA2 first, but falls back to WPA if the client only supports WPA. With the WPA2 Only option, the router associates only with clients that also support WPA2 security.

Cipher Type: Select the appropriate cipher type to use here. Options to choose from are Temporal Key Integrity Protocol (**TKIP**), Advanced Encryption Standard (**AES**), and Both (**TKIP and AES**).

Group Key Update Interval: Enter the amount of time before the group key used for broadcast and multicast data is changed.

Pre-Shared Key: Enter the password to be used for the wireless network here. This password is required by wireless clients for them to be able to connect to the wireless network successfully.


WIRELESS SECURITY MODE
Security Mode : WPA-Personal
WPA
Use WPA or WPA2 mode to achieve a balance of strong security and best compatibility. This mode uses WPA for legacy clients while maintaining higher security with stations that are WPA2 capable. Also the strongest cipher that the client supports will be used. For best security, use WPA2 Only mode. This mode uses AES(CCMP) cipher and legacy stations are not allowed access with WPA security. For maximum compatibility, use WPA Only. This mode uses TKIP cipher. Some gaming and legacy devices work only in this mode.
To achieve better wireless performance use WPA2 Only security mode (or in other words AES cipher).
WPA Mode : Auto(WPA or WPA2)
Cipher Type : TKIP and AES
Group Key Update Interval : 3600 (seconds)
PRE-SHARED KEY
Enter an 8- to 63-character alphanumeric pass-phrase. For good security it should be of ample length and should not be a commonly known phrase.
Pre-Shared Key :

Wireless Security Mode: WPA-Enterprise

WPA-Enterprise is a more sophisticated level of wireless security which requires a RADIUS Authentication Server. This form of security is used primarily in medium to large-scale network environments.

The following parameters will be available for configuration:

WPA Mode: WPA is the older standard; select this option if the clients that will be used with the router only support this older standard. WPA2 is the newer implementation of the stronger IEEE 802.11i security standard. With the **WPA2** option, the router tries WPA2 first, but falls back to WPA if the client only supports WPA. With the **WPA2 Only** option, the router associates only with clients that also support WPA2 security.

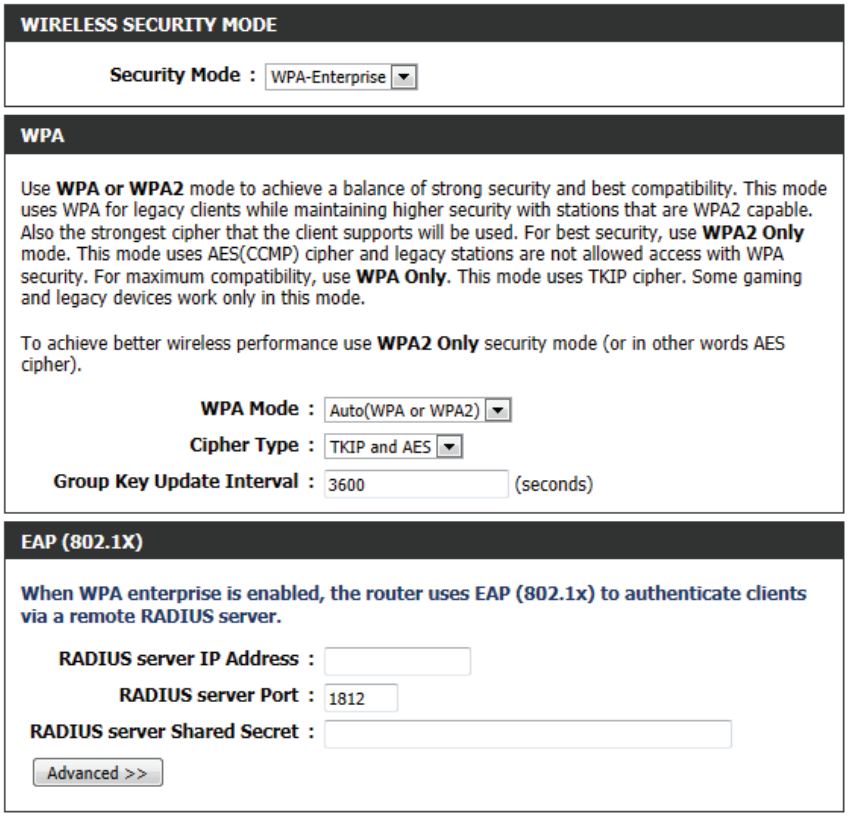
Cipher Type: Select the appropriate cipher type to use here. Options to choose from are Temporal Key Integrity Protocol (**TKIP**), Advanced Encryption Standard (**AES**), and Both (**TKIP and AES**).

Group Key Update Interval: Enter the amount of time before the group key used for broadcast and multicast data is changed.

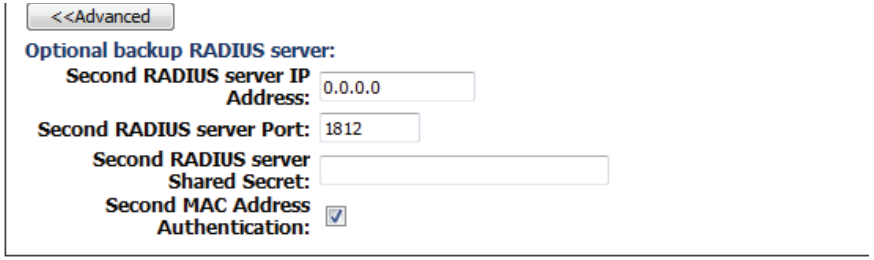
RADIUS Server IP Address: When the user chooses to use the EAP authentication framework, the RADIUS server's IP address can be entered here.

RADIUS Server Port: When the user chooses to use the EAP authentication framework, the RADIUS server's port number can be entered here.

RADIUS Server Shared Secret: Enter the shared secret (password) used here. This password needs to be the same on all of the wireless clients for them to be able to connect to the wireless network successfully.

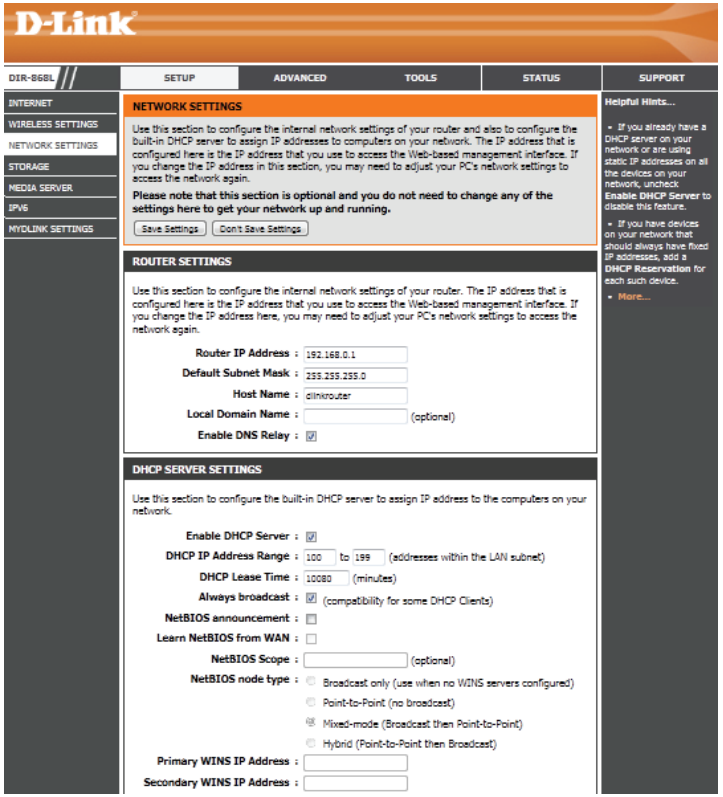

WIRELESS SECURITY MODE
Security Mode : WPA-Enterprise
WPA
Use WPA or WPA2 mode to achieve a balance of strong security and best compatibility. This mode uses WPA for legacy clients while maintaining higher security with stations that are WPA2 capable. Also the strongest cipher that the client supports will be used. For best security, use WPA2 Only mode. This mode uses AES(CCMP) cipher and legacy stations are not allowed access with WPA security. For maximum compatibility, use WPA Only. This mode uses TKIP cipher. Some gaming and legacy devices work only in this mode.
To achieve better wireless performance use WPA2 Only security mode (or in other words AES cipher).
WPA Mode : Auto(WPA or WPA2)
Cipher Type : TKIP and AES
Group Key Update Interval : 3600 (seconds)
EAP (802.1X)
When WPA enterprise is enabled, the router uses EAP (802.1x) to authenticate clients via a remote RADIUS server.
RADIUS server IP Address :
RADIUS server Port : 1812
RADIUS server Shared Secret :
Advanced >>

Optional backup RADIUS server (Advanced): Click the **Advanced** button to enter settings for the optional backup RADIUS server. This option allows users to specify a secondary RADIUS server to be used in the event that the primary RADUIS server fails. Enter the information for the secondary server in the same manner as the primary server described in the steps on the previous page



Network Settings

This section will allow you to change the local network settings of the router and to configure the DHCP settings.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DIR-868L
SETUP
ADVANCED
TOOLS
STATUS
SUPPORT
INTERNET
WIRELESS SETTINGS
NETWORK SETTINGS
STORAGE
MEDIA SERVER
IPV6
MYDLINK SETTINGS
NETWORK SETTINGS
Use this section to configure the internal network settings of your router and also to configure the built-in DHCP server to assign IP addresses to computers on your network. The IP address that is configured here is the IP address that you use to access the Web-based management interface. If you change the IP address in this section, you may need to adjust your PC's network settings to access the network again.
Please note that this section is optional and you do not need to change any of the settings here to get your network up and running.
Save Settings
Don't Save Settings
ROUTER SETTINGS
Use this section to configure the internal network settings of your router. The IP address that is configured here is the IP address that you use to access the Web-based management interface. If you change the IP address here, you may need to adjust your PC's network settings to access the network again.
Router IP Address : 192.168.0.1
Default Subnet Mask : 255.255.255.0
Host Name : dlinkrouter
Local Domain Name : (optional)
Enable DNS Relay :
DHCP SERVER SETTINGS
Use this section to configure the built-in DHCP server to assign IP address to the computers on your network.
Enable DHCP Server :
DHCP IP Address Range : 100 to 199 (addresses within the LAN subnet)
DHCP Lease Time : 10080 (minutes)
Always broadcast : (compatibility for some DHCP Clients)
NetBIOS announcement :
Learn NetBIOS from WAN :
NetBIOS Scope : (optional)
NetBIOS node type : Broadcast only (use when no WINS servers configured)
Point-to-Point (no broadcast)
Mixed-mode (Broadcast then Point-to-Point)
Hybrid (Point-to-Point then Broadcast)
Primary WINS IP Address :
Secondary WINS IP Address :
Helpful Hints...
If you already have a DHCP server on your network or are using static IP addresses on all the devices on your network, uncheck Enable DHCP Server to disable this feature.
If you have devices on your network that should always have fixed IP addresses, add a DHCP Reservation for each such device.
More...

Router Settings

This section will allow you to configure the router settings.

Router IP Address: Enter the IP address of the router. The default IP address is 192.168.0.1.

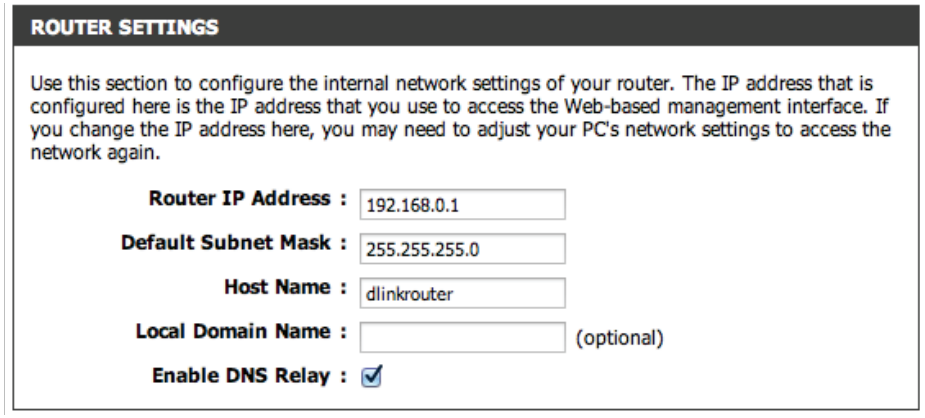
If you change the IP address, once you click **Save Settings**, you will need to enter the new IP address in your browser to get back into the configuration utility.

Default Subnet Mask: Enter the Subnet Mask. The default subnet mask is 255.255.255.0.

Device Name: Enter a name for the router.

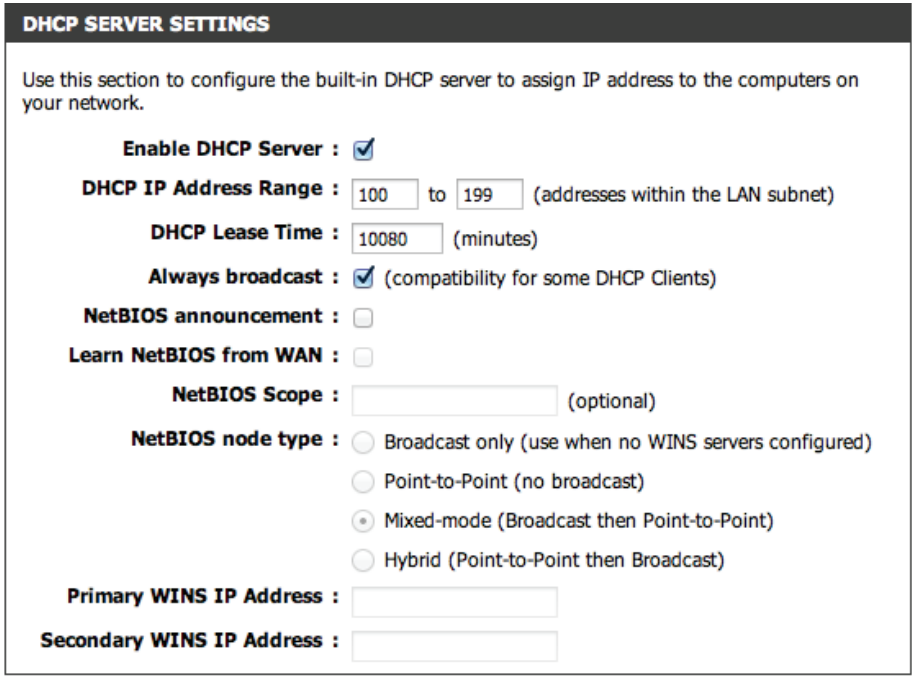
Local Domain: Enter the Domain name (Optional).

Enable DNS Relay: Uncheck the box to transfer the DNS server information from your ISP to your computers. If checked, your computers will use the router for a DNS server.


ROUTER SETTINGS
Use this section to configure the internal network settings of your router. The IP address that is configured here is the IP address that you use to access the Web-based management interface. If you change the IP address here, you may need to adjust your PC's network settings to access the network again.
Router IP Address :
192.168.0.1
Default Subnet Mask :
255.255.255.0
Host Name :
dlinkrouter
Local Domain Name :
(optional)
Enable DNS Relay :

DHCP Server Settings

DHCP stands for Dynamic Host Control Protocol. The DIR-868L has a built-in DHCP server. The DHCP Server will automatically assign an IP address to the computers on the LAN/private network. Be sure to set your computers to be DHCP clients by setting their TCP/IP settings to "Obtain an IP Address Automatically." When you turn your computers on, they will automatically load the proper TCP/IP settings provided by the DIR-868L. The DHCP Server will automatically allocate an unused IP address from the IP address pool to the requesting computer. You must specify the starting and ending address of the IP address pool.


DHCP SERVER SETTINGS
Use this section to configure the built-in DHCP server to assign IP address to the computers on your network.
Enable DHCP Server :
DHCP IP Address Range :
100
to
199
(addresses within the LAN subnet)
DHCP Lease Time :
10080
(minutes)
Always broadcast :
(compatibility for some DHCP Clients)
NetBIOS announcement :
Learn NetBIOS from WAN :
NetBIOS Scope :
(optional)
NetBIOS node type :
Broadcast only (use when no WINS servers configured)
Point-to-Point (no broadcast)
Mixed-mode (Broadcast then Point-to-Point)
Hybrid (Point-to-Point then Broadcast)
Primary WINS IP Address :
Secondary WINS IP Address :

Enable DHCP Server: Check this box to enable the DHCP server on your router. Uncheck to disable this function.

DHCP IP Address Range: Enter the starting and ending IP addresses for the DHCP server's IP assignment.

Note: *If you statically (manually) assign IP addresses to your computers or devices, make sure the IP addresses are outside of this range or you may have an IP conflict.*

DHCP Lease Time: The length of time for the IP address lease. Enter the Lease time in minutes.

Always Broadcast: Enable this feature to broadcast your networks DHCP server to LAN/WLAN clients.

NetBIOS Announcement: NetBIOS allows LAN hosts to discover all other computers within the network, enable this feature to allow the DHCP Server to offer NetBIOS configuration settings.

Learn NetBIOS from WAN: Enable this feature to allow WINS information to be learned from the WAN side, disable to allow manual configuration.

NetBIOS Scope: This feature allows the configuration of a NetBIOS 'domain' name under which network hosts operates. This setting has no effect if the 'Learn NetBIOS information from WAN' is activated.

NetBIOS Node:

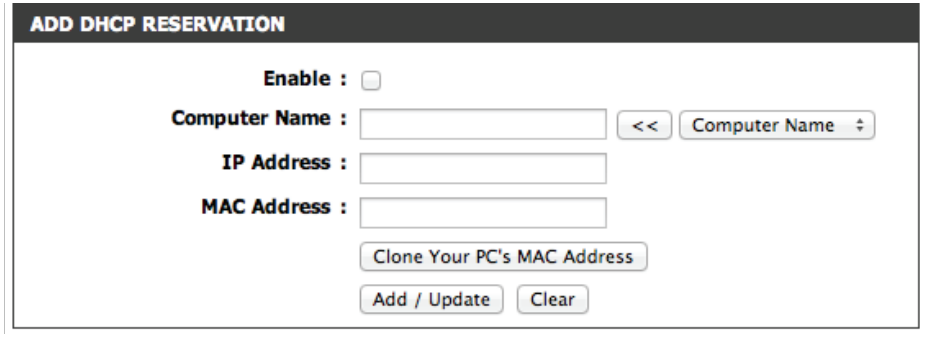
Select the different type of NetBIOS node; **Broadcast only**, **Point-to-Point**, **Mixed-mode**, and **Hybrid**.

WINS IP Address: Enter your primary and secondary WINS Server IP address(es).

DHCP Reservation

If you want a computer or device to always have the same IP address assigned, you can create a DHCP reservation. The router will assign the IP address only to that computer or device.

Note: *This IP address must be within the DHCP IP Address Range.*



Enable: Check this box to enable the reservation.

Computer Name: Enter the computer name or select from the drop-down menu and click <<.

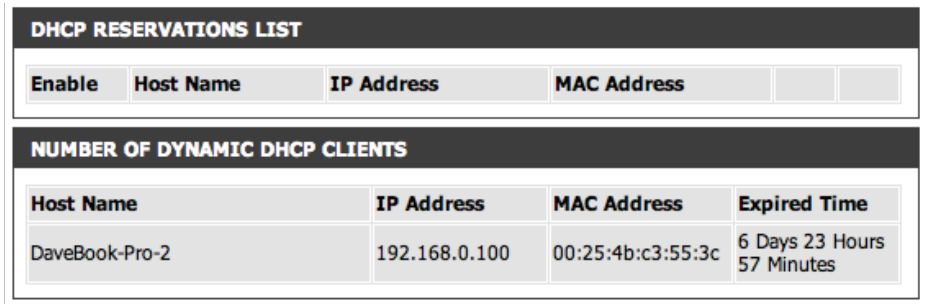
IP Address: Enter the IP address you want to assign to the computer or device. This IP Address must be within the DHCP IP Address Range.

MAC Address: Enter the MAC address of the computer or device.

Clone Your PC's MAC Address: If you want to assign an IP address to the computer you are currently on, click this button to populate the fields.

Add/Update: Click **Add/Update** to save your entry. You must click **Save Settings** at the top to activate your reservations.

DHCP Reservations List



DHCP Reservations List: Displays any reservation entries. Displays the host name (name of your computer or device), MAC address, and IP address.

Enable: Check to enable the reservation.

Edit: Click the edit icon to make changes to the reservation entry.

Delete: Click to remove the reservation from the list.

Storage

This page will allow you to set up access to files on an external USB hard drive[1] or thumb drive that is plugged into the router. You can do this through local network or from the Internet using either a web browser or an app on your smartphone or tablet. You can create users that can be allowed access to these files through SharePort Mobile services accessible through a web UI or on mobile devices using the SharePort Mobile app available for iOS and Android.

D-Link
DIR-868L
SETUP
ADVANCED
TOOLS
STATUS
SUPPORT
INTERNET
WIRELESS SETTINGS
NETWORK SETTINGS
STORAGE
MEDIA SERVER
IPV6
MYDLINK SETTINGS
STORAGE
Web File Access allows you to use a web browser to remotely access files stored on an SD card or USB storage drive plugged into the router. To use this feature, check the Enable Web File Access checkbox, then use the Admin account or create user accounts to manage access to your storage devices. After plugging in an SD card or USB storage drive, the new device will appear in the list with a link to it. You can then use this link to connect to the drive and log in with a user account.
Save Settings
Don't Save Settings
Helpful Hints...
• The Storage page contains information about the USB storage drives or SD cards currently plugged into the device.
• More...
SHAREPORT WEB ACCESS
Enable SharePort Web Access :
HTTP Access Port : 8181
HTTPS Access Port : 4433
Allow Remote Access :
10 -- USER CREATION
User Name :
Password :
Verify Password :
<< User Name
Add/Edit
USER LIST
No. User Name Access Path Permission Edit Delete
1 admin / Read/Write
2 Guest (1) none Read Only
NUMBER DEVICES:0
Device Total Space Free Space
SHAREPORT ACCESS LINK
You can then use this link to connect to the drive and log in with a user account.
Save Settings
Don't Save Settings
WIRELESS

Enable SharePort Web Access Check this box if you wish to be able to access SharePort through a browser as well as the mobile app.

HTTP Access Port: Enter the port you want to use when accessing SharePort using a web browser.

HTTPS Access Port: Enter the port you want to use when accessing SharePort through a secure connection using a web browser.

Allow Remote Access: Check this box if you wish to be able to access SharePort through a web browser over the Internet.

User Creation: To give a new user access to your SharePort storage, enter a User Name and Password here. You can Add new users or choose existing users from the drop-down menu if you wish to Edit or Delete them.

Note: *The Admin password is the same as the admin password for the router. The Guest password is "guest" and cannot be changed.*

User List: This list displays all of the users with access to the SharePort Mobile content, what they can access, and their Read/Write Permissions.

Number of Devices: All devices you have set up for SharePort access will be listed here.

SharePort Web Access Link: This area will display the HTTP and HTTPS links to connect to your SharePort drive through a web browser from a device on your network.

[1] Supports capacities of up to 1TB for USB storage drives.

Media Server

This page will allow you to enable a DLNA Media Server. DLNA (Digital Living Network Alliance) is the standard for the interoperability of Network Media Devices (NMDs). The user can enjoy multimedia applications (music, pictures and videos) on your network connected PC or media devices. If you agree to share media with devices, any computer or device that connects to your network can play your shared music, pictures and videos.

Note: *The shared media may not be secure. Allowing any devices to stream is recommended only on secure networks.*

DLNA Server: Check to enable DLNA Media Server functions.

DLNA Server Name: Choose a name for your DLNA media server so that it can be found.

Folder: Choose the location of the folder you wish to share or check the box to use the root folder of the entire drive.

iTunes Server: Check to enable iTunes Server functions.

Folder: Choose the location of the iTunes Library folder you wish to share or check the box to use the root folder if it is located on the root folder of the connected drive.

SB 3.0: Use this setting to enable USB 3.0 functionality for the USB port on the back of the router. USB 3.0 provides high-speed transfer speeds with compatible devices. This setting is disabled by default, which means that the USB port will operate at the USB 2.0 specification.

D-Link
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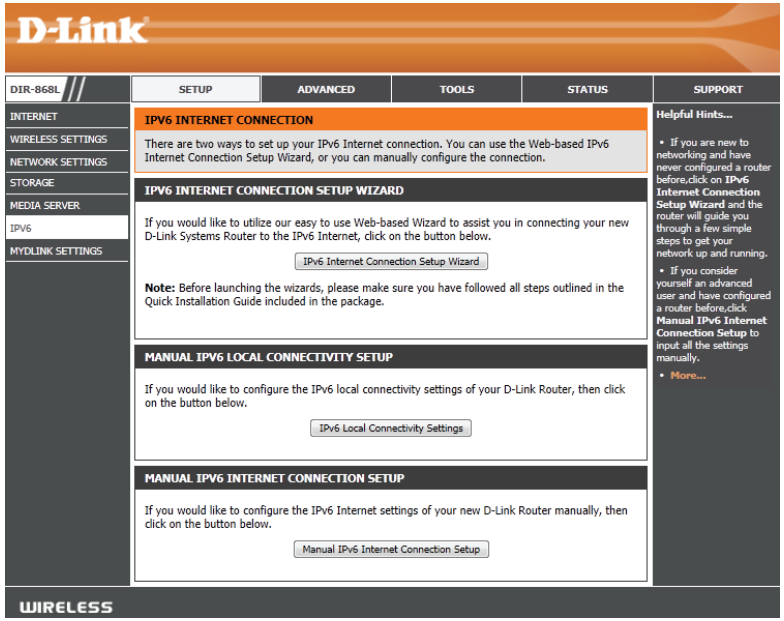
SETUP
ADVANCED
TOOLS
STATUS
SUPPORT
INTERNET
WIRELESS SETTINGS
NETWORK SETTINGS
STORAGE
MEDIA SERVER
IPV6
MYDLINK SETTINGS
MEDIA SERVER
DLNA (Digital Living Network Alliance) is the standard for the interoperability of Network Media Devices (NMDs). The user can enjoy multi-media applications (music, pictures and videos) on your network connected PC or media devices. The iTunes server will allow iTunes software to automatically detect and play music from the router.
NOTE: The shared media may not be secure. Allowing any devices to stream is recommended only on secure networks.
Save Settings
Don't Save Settings
DLNA SERVER
DLNA Server : Enable Disable
DLNA Server Name : DIR868L_DMS
Folder : root
Browse
ITUNES SERVER
iTunes Server : Enable Disable
Folder : root
Browse
USB 3.0
USB 3.0 : Enable Disable
Save Settings
Don't Save Settings
Helpful Hints...
• After adding new media content to the router, click the Enable or Disable button and then save settings.
• More...
WIRELESS

IPv6

On this page, you can configure the IPv6 Connection type. There are two ways to set up the IPv6 Internet connection. You can use the Web-based IPv6 Internet Connection Setup Wizard, or you can manually configure the connection.

If you are a beginner that has not configured a router before, click on the **IPv6 Internet Connection Setup Wizard** button and the router will guide you through a few simple steps to get your network up and running.

If you are an advanced user that has configured a router before, click on the **Manual IPv6 Internet Connection Setup** button to input all the settings manually.


D-Link
DIR-868L
SETUP
ADVANCED
TOOLS
STATUS
SUPPORT
INTERNET
WIRELESS SETTINGS
NETWORK SETTINGS
STORAGE
MEDIA SERVER
IPV6
MYDLINK SETTINGS
IPV6 INTERNET CONNECTION
There are two ways to set up your IPv6 Internet connection. You can use the Web-based IPv6 Internet Connection Setup Wizard, or you can manually configure the connection.
IPV6 INTERNET CONNECTION SETUP WIZARD
If you would like to utilize our easy to use Web-based Wizard to assist you in connecting your new D-Link Systems Router to the IPv6 Internet, click on the button below.
IPv6 Internet Connection Setup Wizard
Note: Before launching the wizards, please make sure you have followed all steps outlined in the Quick Installation Guide included in the package.
MANUAL IPV6 LOCAL CONNECTIVITY SETUP
If you would like to configure the IPv6 local connectivity settings of your D-Link Router, then click on the button below.
IPv6 Local Connectivity Settings
MANUAL IPV6 INTERNET CONNECTION SETUP
If you would like to configure the IPv6 Internet settings of your new D-Link Router manually, then click on the button below.
Manual IPv6 Internet Connection Setup
Helpful Hints...
• If you are new to networking and have never configured a router before,click on IPv6 Internet Connection Setup Wizard and the router will guide you through a few simple steps to get your network up and running.
• If you consider yourself an advanced user and have configured a router before,click Manual IPv6 Internet Connection Setup to input all the settings manually.
• More...
WIRELESS

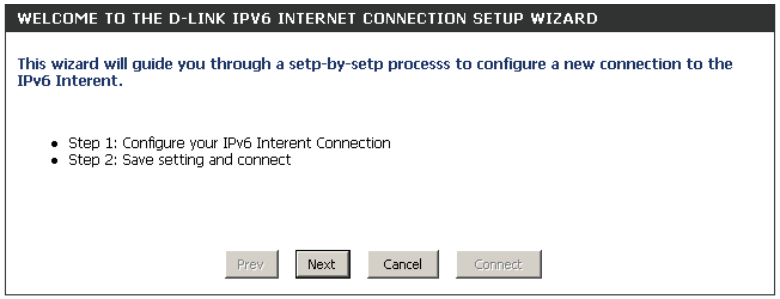
IPv6 Internet Connection Setup Wizard

On this page, the user can configure the IPv6 Connection type using the IPv6 Internet Connection Setup Wizard.

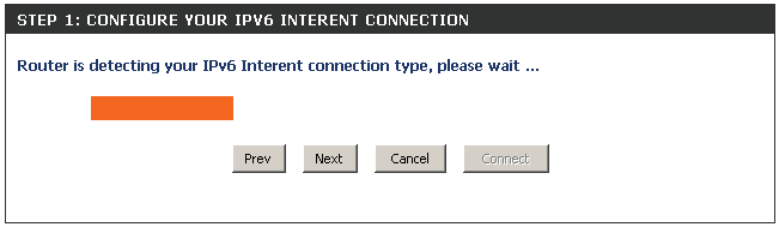
Click the **IPv6 Internet Connection Setup Wizard** button and the router will guide you through a few simple steps to get your network up and running.

IPV6 INTERNET CONNECTION SETUP WIZARD
If you would like to utilize our easy to use Web-based Wizard to assist you in connecting your new D-Link Systems Router to the IPv6 Internet, click on the button below.
IPv6 Internet Connection Setup Wizard
Note: Before launching the wizards, please make sure you have followed all steps outlined in the Quick Installation Guide included in the package.

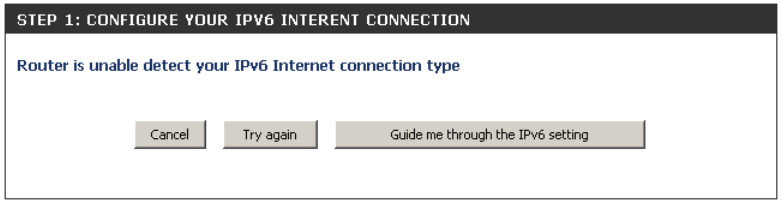
Click **Next** to continue to the next page. Click **Cancel** to discard the changes made and return to the main page.


WELCOME TO THE D-LINK IPV6 INTERNET CONNECTION SETUP WIZARD
This wizard will guide you through a setp-by-setp processs to configure a new connection to the IPv6 Interent.
Step 1: Configure your IPv6 Interent Connection
Step 2: Save setting and connect
Prev
Next
Cancel
Connect

The router will try to detect whether its possible to obtain the IPv6 Internet connection type automatically. If this succeeds then the user will be guided through the input of the appropriate parameters for the connection type found.



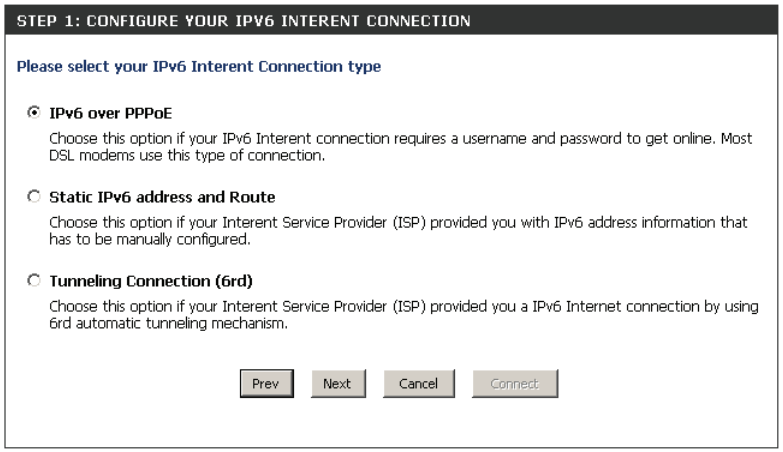
However, if the automatic detection fails, the user will be prompt to either **Try again** or to click on the **Guide me through the IPv6 settings** button to initiate the manual continual of the wizard.


STEP 1: CONFIGURE YOUR IPV6 INTERENT CONNECTION
Router is unable detect your IPv6 Internet connection type
Cancel
Try again
Guide me through the IPv6 setting

There are several connection types to choose from. If you are unsure of your connection method, please contact your IPv6 Internet Service Provider.

Note: If using the PPPoE option, you will need to ensure that any PPPoE client software on your computers has been removed or disabled. The 3 options available on this page are **IPv6 over PPPoE, Static IPv6 address and Route**, and **Tunneling Connection**.

Choose the required IPv6 Internet Connection type and click on the **Next** button to continue. Click on the **Prev** button to return to the previous page. Click on the **Cancel** button to discard all the changes made and return to the main page.

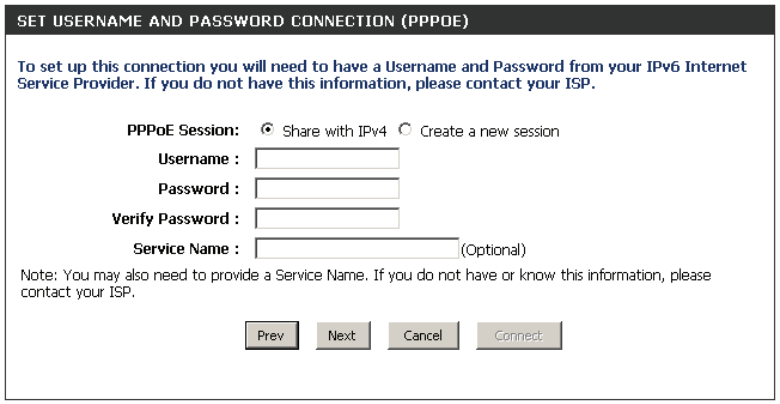

STEP 1: CONFIGURE YOUR IPV6 INTERENT CONNECTION
Please select your IPv6 Interent Connection type
IPv6 over PPPoE
Choose this option if your IPv6 Interent connection requires a username and password to get online. Most DSL modems use this type of connection.
Static IPv6 address and Route
Choose this option if your Interent Service Provider (ISP) provided you with IPv6 address information that has to be manually configured.
Tunneling Connection (6rd)
Choose this option if your Interent Service Provider (ISP) provided you a IPv6 Internet connection by using 6rd automatic tunneling mechanism.
Prev
Next
Cancel
Connect

Click on the **Next** button to continue. Click on the **Prev** button to return to the previous page.

Click on the **Cancel** button to discard all the changes made and return to the main page.

IPv6 over PPPoE

After selecting the IPv6 over PPPoE option, the user will be able to configure the IPv6 Internet connection that requires a username and password to get online. Most DSL modems use this type of connection.


SET USERNAME AND PASSWORD CONNECTION (PPPOE)
To set up this connection you will need to have a Username and Password from your IPv6 Internet Service Provider. If you do not have this information, please contact your ISP.
PPPoE Session:
Share with IPv4
Create a new session
Username :
Password :
Verify Password :
Service Name :
(Optional)
Note: You may also need to provide a Service Name. If you do not have or know this information, please contact your ISP.
Prev
Next
Cancel
Connect

The following parameters will be available for configuration:

PPPoE Session: Select the PPPoE Session value used here. This option will state that this connection shares it's information with the already configured IPv6 PPPoE connection, or the user can create a new PPPoE connection here.

Username: Enter the PPPoE username used here. If you do not know your user name, please contact your ISP.

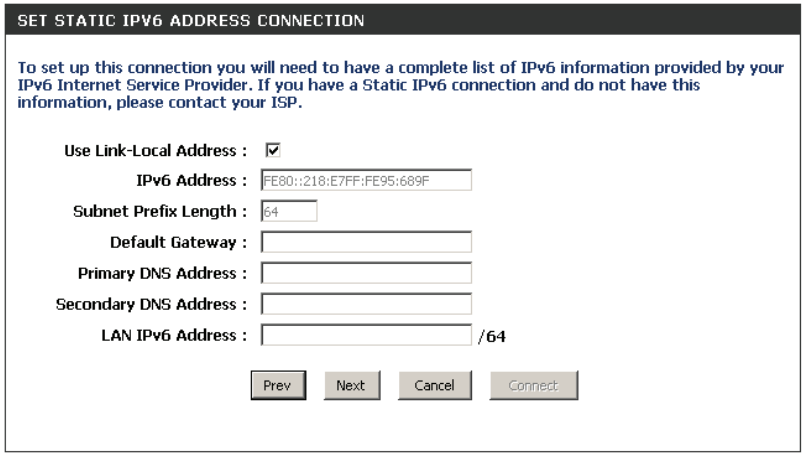
Password: Enter the PPPoE password used here. If you do not know your password, please contact your ISP.

Verify Password: Re-enter the PPPoE password used here.

Service Name: Enter the service name for this connection here. This option is optional.

Static IPv6 Address Connection

This mode is used when your ISP provides you with a set IPv6 addresses that does not change. The IPv6 information is manually entered in your IPv6 configuration settings. You must enter the IPv6 address, Subnet Prefix Length, Default Gateway, Primary DNS Server, and Secondary DNS Server. Your ISP provides you with all this information.


SET STATIC IPV6 ADDRESS CONNECTION
To set up this connection you will need to have a complete list of IPv6 information provided by your IPv6 Internet Service Provider. If you have a Static IPv6 connection and do not have this information, please contact your ISP.
Use Link-Local Address :
IPv6 Address :
FE80::218:E7FF:FE95:689F
Subnet Prefix Length :
64
Default Gateway :
Primary DNS Address :
Secondary DNS Address :
LAN IPv6 Address :
/64
Prev
Next
Cancel
Connect

Use Link-Local Address: The Link-local address is used by nodes and routers when communicating with neighboring nodes on the same link. This mode enables IPv6-capable devices to communicate with each other on the LAN side.

IPv6 Address: Enter the WAN IPv6 address for the router here.

Subnet Prefix Length: Enter the WAN subnet prefix length value used here.

Default Gateway: Enter the WAN default gateway IPv6 address used here.

Primary DNS Address: Enter the WAN primary DNS Server address used here.

Secondary DNS Address: Enter the WAN secondary DNS Server address used here.

LAN IPv6 Address: These are the settings of the LAN (Local Area Network) IPv6 interface for the router. The router's LAN IPv6 Address configuration is based on the IPv6 Address and Subnet assigned by your ISP. (A subnet with prefix /64 is supported in LAN.)

Tunneling Connection (6rd)

After selecting the Tunneling Connection (6rd) option, the user can configure the IPv6 6rd connection settings.

6rd IPv6 Prefix: Enter the 6rd IPv6 address and prefix value used here.

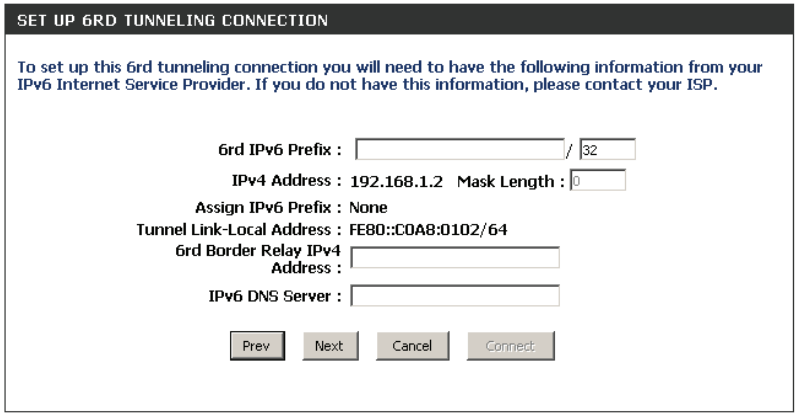
IPv4 Address: Enter the IPv4 address used here.

Mask Length: Enter the IPv4 mask length used here.

Assigned IPv6 Prefix: Displays the IPv6 assigned prefix value here.

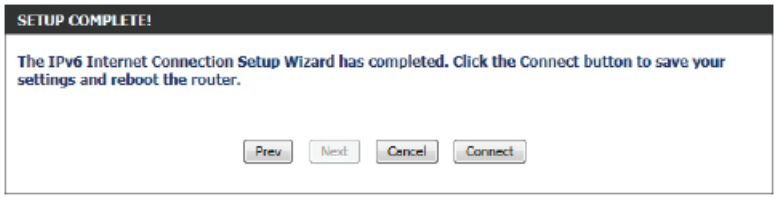
6rd Border Relay IPv4 Address: Enter the 6rd border relay IPv4 address used here.

IPv6 DNS Server: Enter the primary DNS Server address used here.


SET UP 6RD TUNNELING CONNECTION
To set up this 6rd tunneling connection you will need to have the following information from your IPv6 Internet Service Provider. If you do not have this information, please contact your ISP.
6rd IPv6 Prefix :
/ 32
IPv4 Address : 192.168.1.2 Mask Length : 0
Assign IPv6 Prefix : None
Tunnel Link-Local Address : FE80::C0A8:0102/64
6rd Border Relay IPv4 Address :
IPv6 DNS Server :
Prev
Next
Cancel
Connect

The IPv6 Internet Connection Setup Wizard is complete.

Click on the **Connect** button to continue. Click on the **Prev** button to return to the previous page. Click on the **Cancel** button to discard all the changes made and return to the main page.


SETUP COMPLETE!
The IPv6 Internet Connection Setup Wizard has completed. Click the Connect button to save your settings and reboot the router.
Prev
Next
Cancel
Connect

Manual IPv6 Local Connectivity Setup

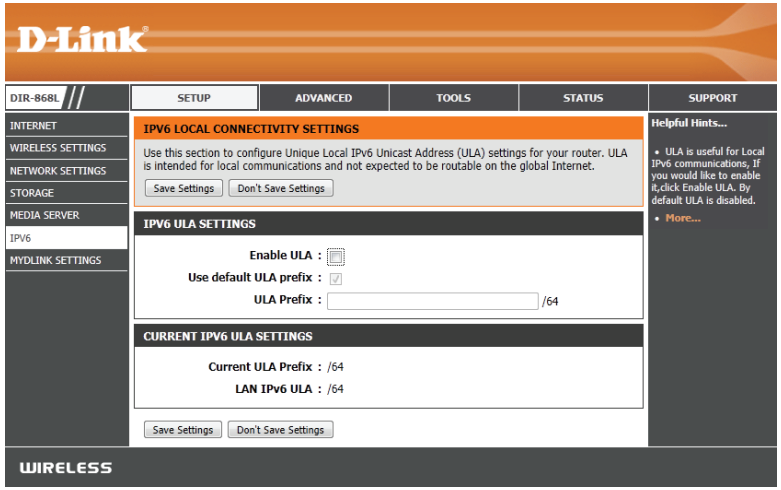
You can set up a local-only IPv6 Internet connection as well. If you want to configure an IPv6 connection that will not connect to the Internet, click on the **Manual IPv6 Local Connectivity Settings** button.

Enable ULA: Click here to enable Unique Local IPv6 Unicast Addresses settings.

Use Default ULA Prefix: Checking this box will automatically configure the ULA prefix for the default setting.

ULA Prefix: If you wish to choose your own ULA prefix, enter it here.

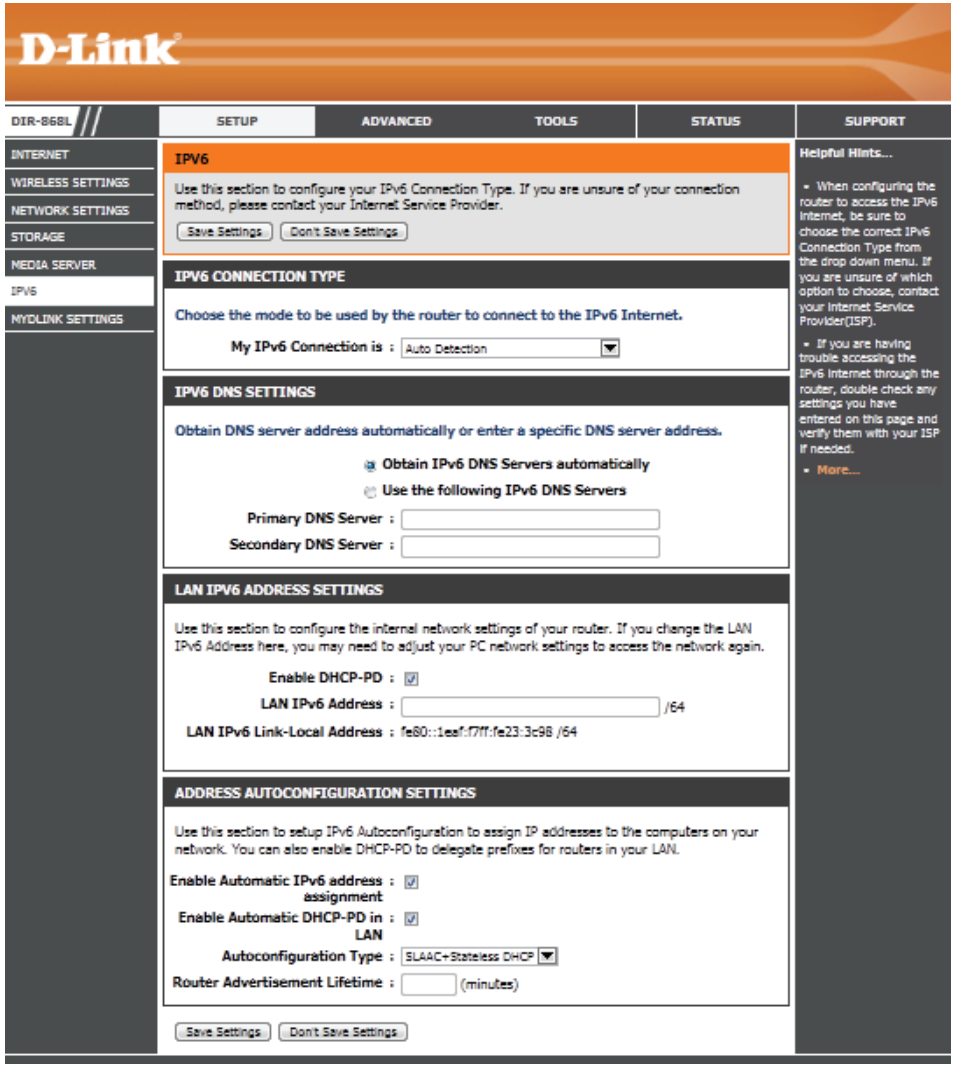
Current IPv6 ULA Settings: This section with display the current settings for your IPv6 ULA.



IPv6 Manual Setup

There are several connection types to choose from: Auto Detection, Static IPv6, Autoconfiguration (SLAAC/DHCPv6), PPPoE, IPv6 in IPv4 Tunnel, 6to4, 6rd, and Link-local. If you are unsure of your connection method, please contact your IPv6 Internet Service Provider.

Note: If using the PPPoE option, you will need to ensure that any PPPoE client software on your computers has been removed or disabled.


D-Link
DIR-868L
SETUP
ADVANCED
TOOLS
STATUS
SUPPORT
INTERNET
WIRELESS SETTINGS
NETWORK SETTINGS
STORAGE
MEDIA SERVER
IPV6
MYDLINK SETTINGS
IPV6
Use this section to configure your IPv6 Connection Type. If you are unsure of your connection method, please contact your Internet Service Provider.
Save Settings
Don't Save Settings
IPV6 CONNECTION TYPE
Choose the mode to be used by the router to connect to the IPv6 Internet.
My IPv6 Connection is :
Auto Detection
IPV6 DNS SETTINGS
Obtain DNS server address automatically or enter a specific DNS server address.
Obtain IPv6 DNS Servers automatically
Use the following IPv6 DNS Servers
Primary DNS Server :
Secondary DNS Server :
LAN IPV6 ADDRESS SETTINGS
Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC network settings to access the network again.
Enable DHCP-PD :
LAN IPv6 Address :
/64
LAN IPv6 Link-Local Address : fe80::1eaf:f7ff:fe23:3c98 /64
ADDRESS AUTOCONFIGURATION SETTINGS
Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network. You can also enable DHCP-PD to delegate prefixes for routers in your LAN.
Enable Automatic IPv6 address assignment :
Enable Automatic DHCP-PD in LAN :
Autoconfiguration Type :
SLAAC+Stateless DHCP
Router Advertisement Lifetime :
(minutes)
Save Settings
Don't Save Settings
Helpful Hints...
When configuring the router to access the IPv6 Internet, be sure to choose the correct IPv6 Connection Type from the drop down menu. If you are unsure of which option to choose, contact your Internet Service Provider(ISP).
If you are having trouble accessing the IPv6 Internet through the router, double check any settings you have entered on this page and verify them with your ISP if needed.
More...

Static IPv6

My IPv6 Connection Is: Select **Static IPv6** from the drop-down menu.

Use Link-Local Address: Enter the address settings supplied by your Internet provider (ISP).

Subnet Prefix Length: Enter a subnet prefix length.

IPv6 Default Gateway: Enter the default gateway for your IPv6 connection.

Primary/ Secondary IPv6 DNS Servers: Enter the primary and secondary DNS server addresses.

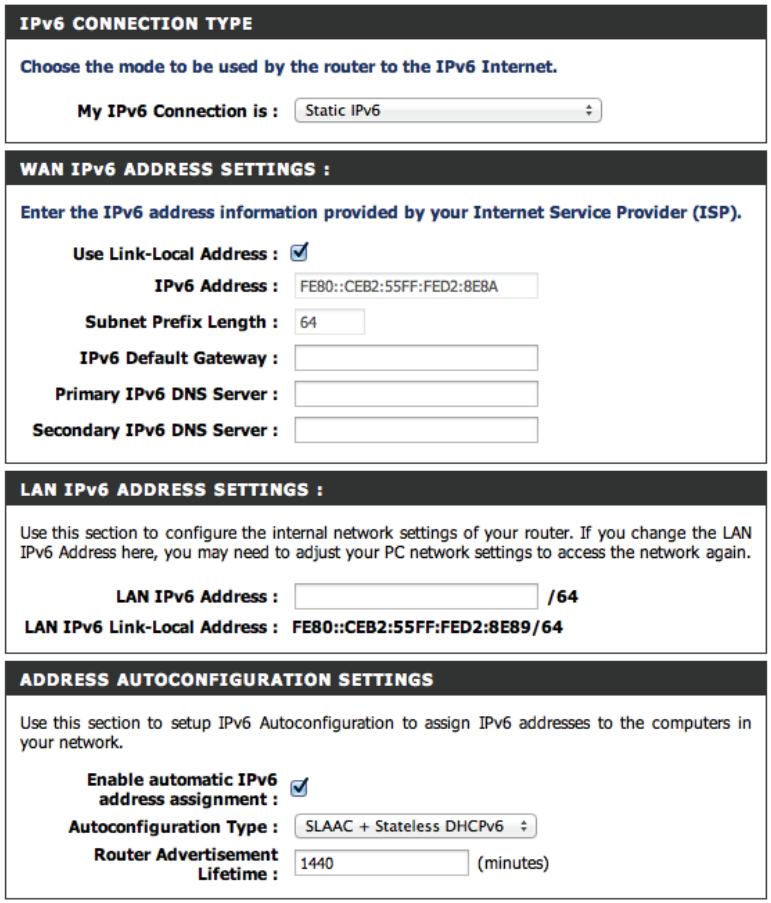
LAN IPv6 Address: Enter the LAN (local) IPv6 address for the router.

LAN Link-Local Address: Displays the router's LAN Link-Local Address.

Enable Automatic IPv6 Address Assignment: Check to enable the Autoconfiguration feature.

Autoconfiguration Type: Choose either **Stateful DHCPv6**, **SLAAC + RDNSS** or **SLAAC + Stateless DHCPv6** from the drop-down menu.

Router Advertisement Lifetime: Enter the IPv6 Address Lifetime (in minutes).


IPv6 CONNECTION TYPE
Choose the mode to be used by the router to the IPv6 Internet.
My IPv6 Connection is :
Static IPv6
WAN IPv6 ADDRESS SETTINGS :
Enter the IPv6 address information provided by your Internet Service Provider (ISP).
Use Link-Local Address :
IPv6 Address :
FE80::CEB2:55FF:FED2:8E8A
Subnet Prefix Length :
64
IPv6 Default Gateway :
Primary IPv6 DNS Server :
Secondary IPv6 DNS Server :
LAN IPv6 ADDRESS SETTINGS :
Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC network settings to access the network again.
LAN IPv6 Address :
/64
LAN IPv6 Link-Local Address : FE80::CEB2:55FF:FED2:8E89/64
ADDRESS AUTOCONFIGURATION SETTINGS
Use this section to setup IPv6 Autoconfiguration to assign IPv6 addresses to the computers in your network.
Enable automatic IPv6 address assignment :
Autoconfiguration Type :
SLAAC + Stateless DHCPv6
Router Advertisement Lifetime :
1440
(minutes)

Auto Detection

My IPv6 Connection Is: Select **Auto Detection** from the drop-down menu.

IPv6 DNS Settings: Select either **Obtain DNS server address automatically** or **Use the following DNS Address**.

Primary/Secondary DNS Address: Enter the primary and secondary DNS server addresses.

Enable DHCP-PD: Check this box to enable DHCP-PD services.

LAN IPv6 Address: Enter the LAN (local) IPv6 address for the router.

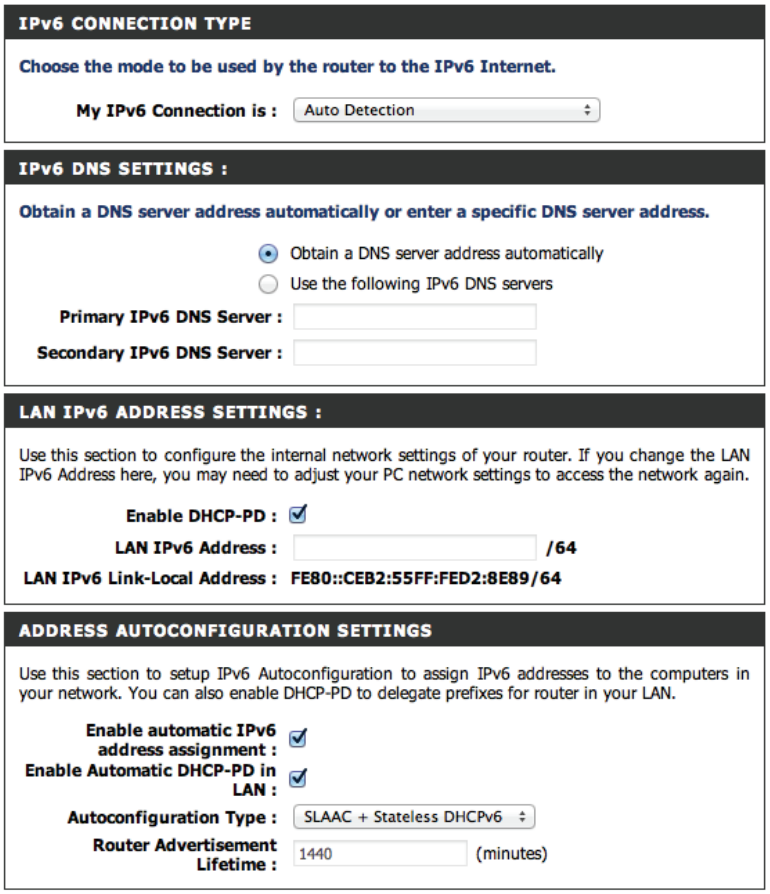
LAN Link-Local Address: Displays the router's LAN Link-Local Address.

Enable Automatic IPv6 Address Assignment: Check to enable the Automatic IPv6 Address Assignment feature.

Enable Automatic DHCP-PD in LAN: Check this box to automatically enable DHCP-PD services.

Autoconfiguration Type: Select **Stateful (DHCPv6)**, **SLAAC + RDNSS** or **SLAAC + Stateless DHCPv6**.

Router Advertisement Lifetime: Enter the IPv6 Address Lifetime (in minutes).


IPv6 CONNECTION TYPE
Choose the mode to be used by the router to the IPv6 Internet.
My IPv6 Connection is :
Auto Detection
IPv6 DNS SETTINGS :
Obtain a DNS server address automatically or enter a specific DNS server address.
Obtain a DNS server address automatically
Use the following IPv6 DNS servers
Primary IPv6 DNS Server :
Secondary IPv6 DNS Server :
LAN IPv6 ADDRESS SETTINGS :
Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC network settings to access the network again.
Enable DHCP-PD :
LAN IPv6 Address :
/64
LAN IPv6 Link-Local Address : FE80::CEB2:55FF:FED2:8E89/64
ADDRESS AUTOCONFIGURATION SETTINGS
Use this section to setup IPv6 Autoconfiguration to assign IPv6 addresses to the computers in your network. You can also enable DHCP-PD to delegate prefixes for router in your LAN.
Enable automatic IPv6 address assignment :
Enable Automatic DHCP-PD in LAN :
Autoconfiguration Type :
SLAAC + Stateless DHCPv6
Router Advertisement Lifetime :
1440
(minutes)

PPPoE

My IPv6 Connection Is: Select **PPPoE** from the drop-down menu.

PPPoE Session: Enter the PPPoE account settings supplied by your Internet provider.

Address Mode: Select **Static** if your ISP assigned you the IP address, subnet mask, gateway, and DNS server addresses. In most cases, select **Dynamic**.

IP Address: Enter the IP address (Static PPPoE only).

User Name: Enter your PPPoE user name.

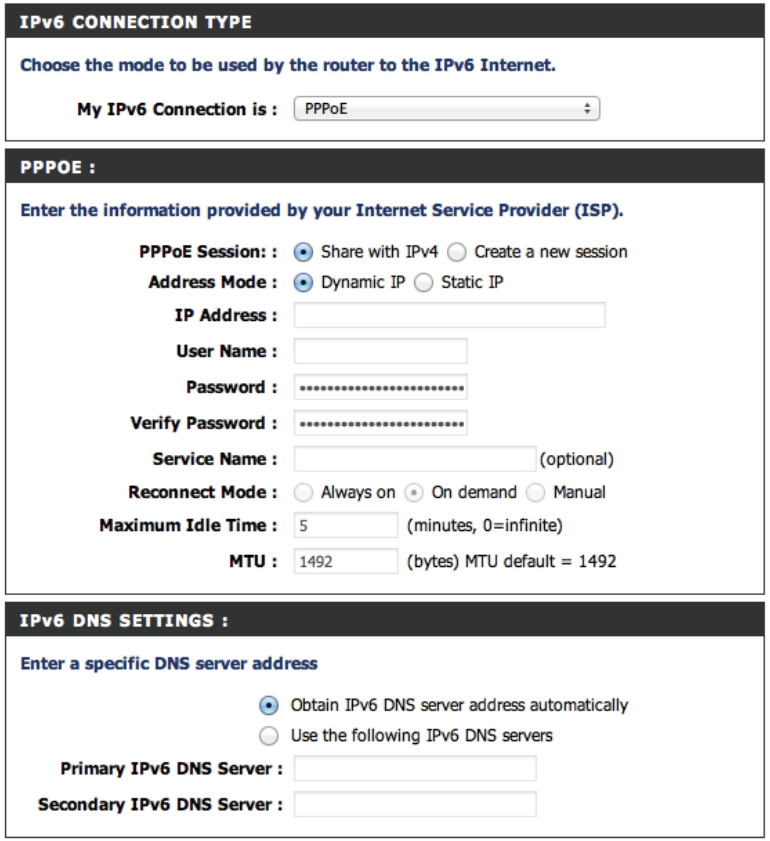
Password: Enter your PPPoE password and retype the password in the next box.

Service Name: Enter the ISP Service Name (optional).

Reconnect Mode: Select either **Always-on**, **On-Demand**, or **Manual**.

Maximum Idle Time: Enter a maximum idle time during which the Internet connection is maintained during inactivity.

MTU: Maximum Transmission Unit - you may need to change the MTU for optimal performance with your specific ISP. 1492 is the default MTU.


IPv6 CONNECTION TYPE
Choose the mode to be used by the router to the IPv6 Internet.
My IPv6 Connection is :
PPPoE
PPPOE :
Enter the information provided by your Internet Service Provider (ISP).
PPPoE Session: : Share with IPv4 Create a new session
Address Mode : Dynamic IP Static IP
IP Address :
User Name :
Password :
Verify Password :
Service Name : (optional)
Reconnect Mode : Always on On demand Manual
Maximum Idle Time : 5 (minutes, 0=infinite)
MTU : 1492 (bytes) MTU default = 1492
IPv6 DNS SETTINGS :
Enter a specific DNS server address
Obtain IPv6 DNS server address automatically
Use the following IPv6 DNS servers
Primary IPv6 DNS Server :
Secondary IPv6 DNS Server :

IPv6 DNS Settings: Select either **Obtain DNS server address automatically** or **Use the following DNS Address**.

Primary/Secondary DNS Address: Enter the primary and secondary DNS server addresses.

Enable DHCP-D: Check this box to enable DHCP prefix delegation for each LAN on the network.

LAN IPv6 Address: Enter the LAN (local) IPv6 address for the router.

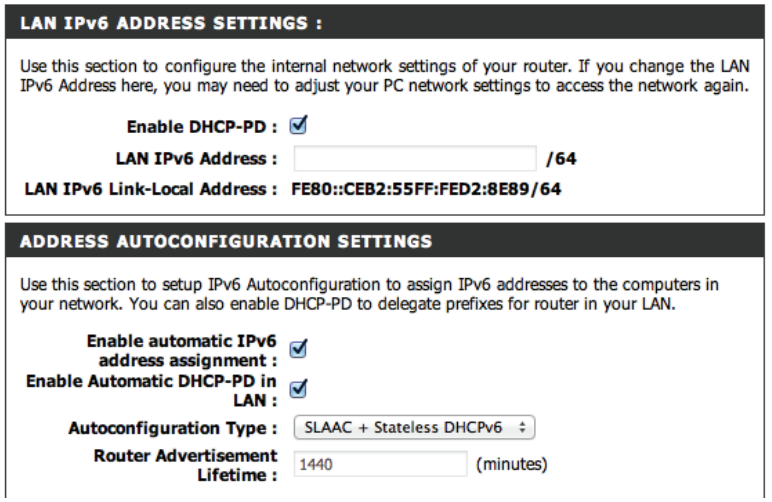
LAN Link-Local Address: Displays the router's LAN Link-Local Address.

Enable Automatic IPv6 Address Assignment: Check to enable the Automatic IPv6 Address Assignment feature.

Enable Automatic DHCP-PD in LAN: Check this box to enable automatica configuration of the DHCP prefix delegation for each LAN on the network.

Autoconfiguration Type: Select **Stateful (DHCPv6)**, **SLAAC + RDNSS** or **SLAAC + Stateless DHCPv6**.

IPv6 Address Lifetime: Enter the IPv6 Address Lifetime (in minutes).


LAN IPv6 ADDRESS SETTINGS :
Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC network settings to access the network again.
Enable DHCP-PD :
LAN IPv6 Address :
/64
LAN IPv6 Link-Local Address : FE80::CEB2:55FF:FED2:8E89/64
ADDRESS AUTOCONFIGURATION SETTINGS
Use this section to setup IPv6 Autoconfiguration to assign IPv6 addresses to the computers in your network. You can also enable DHCP-PD to delegate prefixes for router in your LAN.
Enable automatic IPv6 address assignment :
Enable Automatic DHCP-PD in LAN :
Autoconfiguration Type :
SLAAC + Stateless DHCPv6
Router Advertisement Lifetime :
1440
(minutes)

IPv6 in IPv4 Tunneling

My IPv6 Connection Is: Select **IPv6 in IPv4 Tunnel** from the drop-down menu.

Remote IPv4 Address: Enter the IPv4 remote address you will use.

Remote IPv6 Address: Enter the IPv6 remote address you will use.

Local IPv4 Address: Enter the IPv4 local address you will use.

Local IPv6 Address: Enter the IPv6 local address you will use.

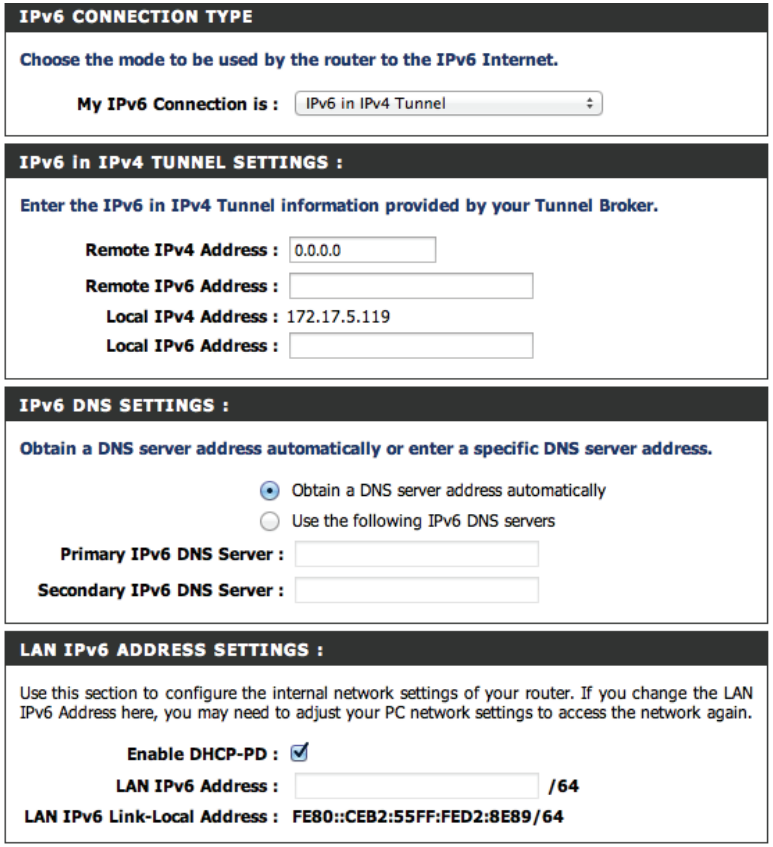
IPv6 DNS Settings: Select either **Obtain DNS server address automatically** or **Use the following DNS Address**.

Primary/Secondary DNS Address: Enter the primary and secondary DNS server addresses.

Enable DHCP-D: Check this box to enable DHCP prefix delegation for each LAN.

LAN IPv6 Address: Enter the LAN (local) IPv6 address for the router.

LAN IPv6 Lin-Local Address: Displays the router's LAN Link-Local Address.

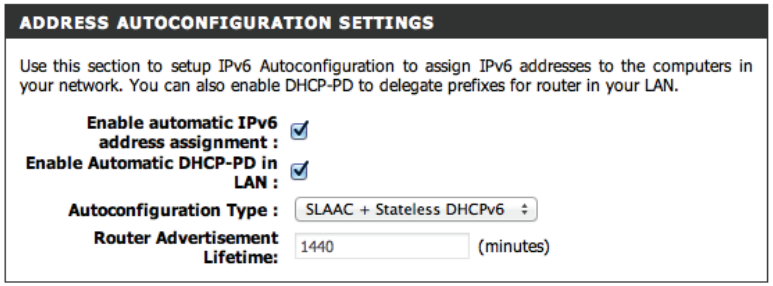

IPv6 CONNECTION TYPE
Choose the mode to be used by the router to the IPv6 Internet.
My IPv6 Connection is :
IPv6 in IPv4 Tunnel
IPv6 in IPv4 TUNNEL SETTINGS :
Enter the IPv6 in IPv4 Tunnel information provided by your Tunnel Broker.
Remote IPv4 Address :
0.0.0.0
Remote IPv6 Address :
Local IPv4 Address :
172.17.5.119
Local IPv6 Address :
IPv6 DNS SETTINGS :
Obtain a DNS server address automatically or enter a specific DNS server address.
Obtain a DNS server address automatically
Use the following IPv6 DNS servers
Primary IPv6 DNS Server :
Secondary IPv6 DNS Server :
LAN IPv6 ADDRESS SETTINGS :
Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC network settings to access the network again.
Enable DHCP-PD :
LAN IPv6 Address :
/64
LAN IPv6 Link-Local Address :
FE80::CEB2:55FF:FED2:8E89/64

Enable Automatic IPv6 Address Assignment: Check to enable the Automatic IPv6 Address Assignment feature.

Enable Automatic DHCP-PD in LAN: Check this box to enable automatic configuration of the DHCP prefix delegation for each LAN on the network.

Autoconfiguration Type: Select **Stateful (DHCPv6)**, **SLAAC + RDNSS** or **SLAAC + Stateless DHCPv6**.

Router Advertisement Lifetime: Enter the Router Advertisement Lifetime (in minutes).


ADDRESS AUTOCONFIGURATION SETTINGS
Use this section to setup IPv6 Autoconfiguration to assign IPv6 addresses to the computers in your network. You can also enable DHCP-PD to delegate prefixes for router in your LAN.
Enable automatic IPv6 address assignment :
Enable Automatic DHCP-PD in LAN :
Autoconfiguration Type :
SLAAC + Stateless DHCPv6
Router Advertisement Lifetime:
1440
(minutes)

6to4

My IPv6 Connection Is: Select **6to4** from the drop-down menu.

6to4 Address: Enter the IPv6 settings supplied by your ISP.

6to4 Relay: Enter the IPv6 relay supplied by your ISP.

Primary/Secondary DNS Address: Enter the primary and secondary DNS server addresses.

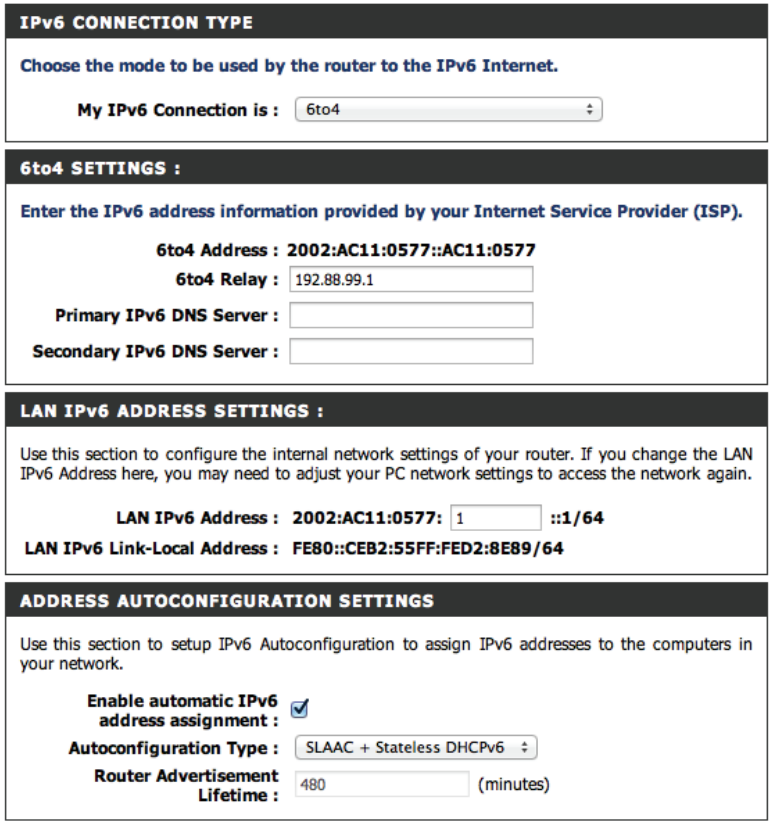
LAN IPv6 Address: Enter the LAN (local) IPv6 address for the router.

LAN IPv6 Link-Local Address: Displays the Router's LAN Link-Local Address.

Enable Automatic IPv6 Address Assignment: Check to enable the Automatic IPv6 Address Assignment feature.

Autoconfiguration Type: Select **Stateful (DHCPv6)**, **SLAAC + RDNSS** or **SLAAC + Stateless DHCPv6**.

Router Advertisement Lifetime: Enter the IPv6 Address Lifetime (in minutes).


IPv6 CONNECTION TYPE
Choose the mode to be used by the router to the IPv6 Internet.
My IPv6 Connection is :
6to4
6to4 SETTINGS :
Enter the IPv6 address information provided by your Internet Service Provider (ISP).
6to4 Address : 2002:AC11:0577::AC11:0577
6to4 Relay : 192.88.99.1
Primary IPv6 DNS Server :
Secondary IPv6 DNS Server :
LAN IPv6 ADDRESS SETTINGS :
Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC network settings to access the network again.
LAN IPv6 Address : 2002:AC11:0577: 1 ::1/64
LAN IPv6 Link-Local Address : FE80::CEB2:55FF:FED2:8E89/64
ADDRESS AUTOCONFIGURATION SETTINGS
Use this section to setup IPv6 Autoconfiguration to assign IPv6 addresses to the computers in your network.
Enable automatic IPv6 address assignment :
Autoconfiguration Type :
SLAAC + Stateless DHCPv6
Router Advertisement Lifetime :
480
(minutes)

6rd

My IPv6 Connection Is: Select **6rd** from the drop-down menu.

Enable Hub and Spoke Mode: Check this box if you want to minimize the number of routes to the destination by using a hub and spoke method of networking.

6rd Configuration: Choose the **6rd DHCPv4 Option** to automatically discover and populate the data values, or **Manual Configuration** to enter the settings yourself.

6rd IPv6 Prefix: Enter the 6rd IPv6 prefix settings supplied by your ISP.

IPv4 Address: You IPv4 address will appear here.

Mask Length: Enter the desired IPv4 mask length.

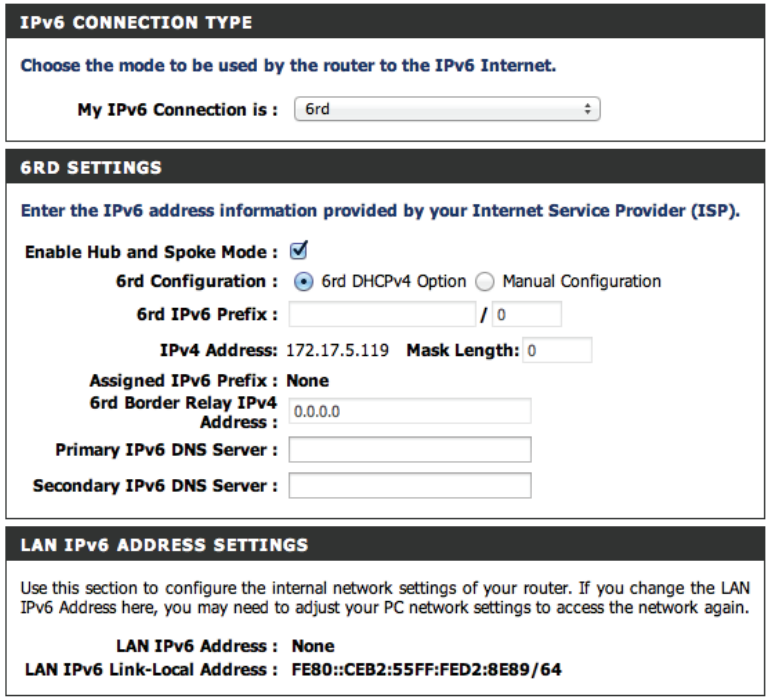
Assigned IPv6 Prefix: When an IPv6 prefix is assigned, it will appear here.

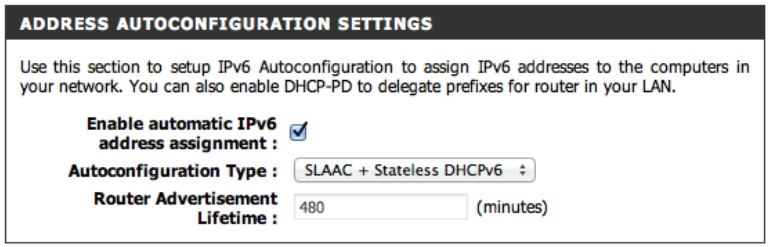
6rd Border Relay IPv4 Address: Enter the 6rd Border Relay IPv4 address settings supplied by your ISP.

Primary/ Secondary DNS Address: Enter the primary and secondary DNS server addresses.

LAN IPv6 Address: Enter the LAN (local) IPv6 address for the router.

LAN IPv6 Link-Local Address: Displays the Router's LAN Link-Local Address.


IPv6 CONNECTION TYPE
Choose the mode to be used by the router to the IPv6 Internet.
My IPv6 Connection is :
6rd
6RD SETTINGS
Enter the IPv6 address information provided by your Internet Service Provider (ISP).
Enable Hub and Spoke Mode :
6rd Configuration :
6rd DHCPv4 Option
Manual Configuration
6rd IPv6 Prefix :
/ 0
IPv4 Address: 172.17.5.119
Mask Length: 0
Assigned IPv6 Prefix : None
6rd Border Relay IPv4 Address :
0.0.0.0
Primary IPv6 DNS Server :
Secondary IPv6 DNS Server :
LAN IPv6 ADDRESS SETTINGS
Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC network settings to access the network again.
LAN IPv6 Address : None
LAN IPv6 Link-Local Address : FE80::CEB2:55FF:FED2:8E89/64


ADDRESS AUTOCONFIGURATION SETTINGS
Use this section to setup IPv6 Autoconfiguration to assign IPv6 addresses to the computers in your network. You can also enable DHCP-PD to delegate prefixes for router in your LAN.
Enable automatic IPv6 address assignment :
Autoconfiguration Type :
SLAAC + Stateless DHCPv6
Router Advertisement Lifetime :
480
(minutes)

Enable Automatic IPv6 Address Assignment: Check to enable the Automatic IPv6 Address Assignment feature.

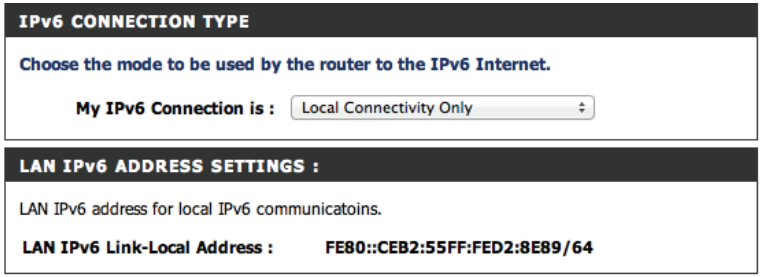
Autoconfiguration Type: Select **Stateful (DHCPv6)**, **SLAAC + RDNSS** or **SLAAC + Stateless DHCPv6**.

Router Advertisement Lifetime: Enter the IPv6 Address Lifetime (in minutes).

Link-Local Connectivity

My IPv6 Connection Is: Select **Link-Local Only** from the drop-down menu.

LAN IPv6 Address Settings: Displays the IPv6 address of the router.


IPv6 CONNECTION TYPE
Choose the mode to be used by the router to the IPv6 Internet.
My IPv6 Connection is :
Local Connectivity Only
LAN IPv6 ADDRESS SETTINGS :
LAN IPv6 address for local IPv6 communicatoins.
LAN IPv6 Link-Local Address :
FE80::CEB2:55FF:FED2:8E89/64

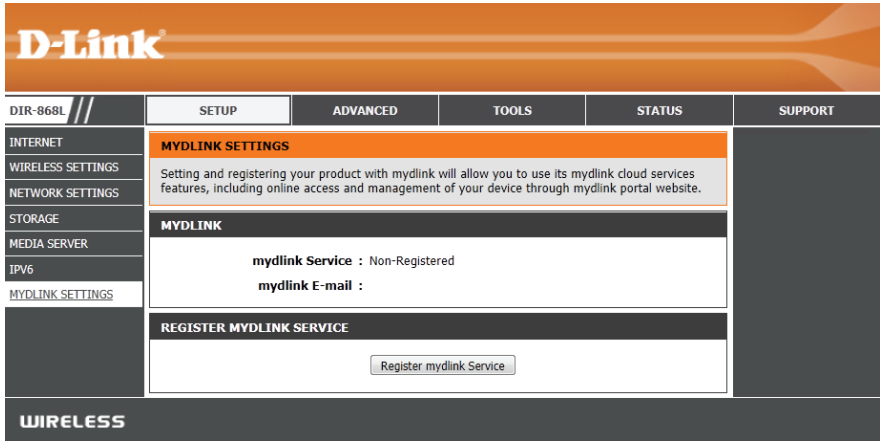
mydlink Settings

Devices that are mydlink-enabled can be accessed and managed through the mydlink website and by using mydlink mobile apps for iOS and Android. You cannot take advantage of these features without a mydlink account. If you have a mydlink account already, you can log in when you first set up the router, or by visitng this setup page.

mydlink Service: Displays whether your device is registered with a mydlink account or not.

mydlink E-mail: Displays the email address associated with your mydlink account if you have an active account.

Register mydlink Service: Click to go to the mydlink website to register your device or edit your settings.



Advanced
Virtual Server

This page will allow you to open a single port. If you would like to open a range of ports, refer to the next page.

Name: Enter a name for the rule or select an application from the drop-down menu. Select an application and click << to populate the fields.

IP Address: Enter the IP address of the computer on your local network that you want to allow the incoming service to. If your computer is receiving an IP address automatically from the router (DHCP), your computer will be listed in the "Computer Name" drop-down menu.

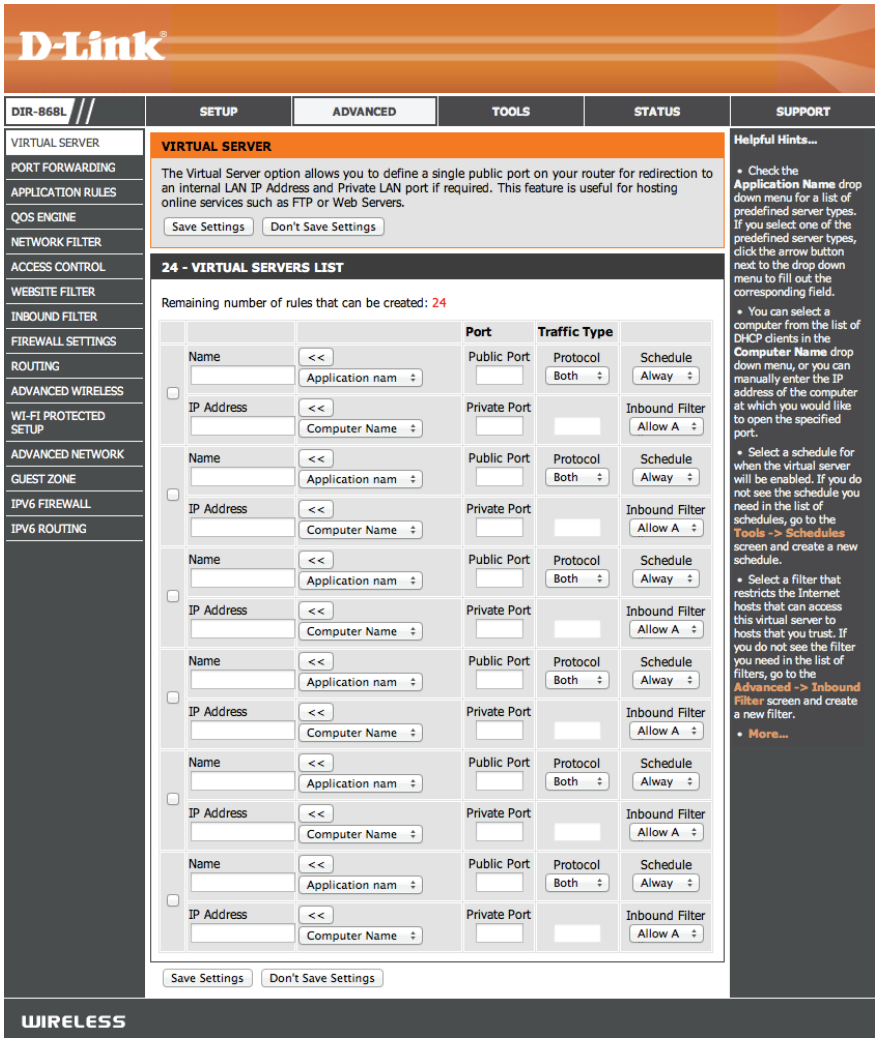
Private Port/ Public Port: Enter the port that you want to open next to Private Port and Public Port. The private and public ports are usually the same. The public port is seen from the Internet side, and the private port is used by the application on the computer within your local network.

Protocol: Select **TCP**, **UDP**, or **Both** from the drop-down menu.

Schedule: The schedule of time when the Virtual Server Rule will be enabled. The schedule may be set to Always, which will allow the particular service to always be enabled. You can create your own times in the **Tools** > **Schedules** section.

Inbound Filter: Select **Allow All** (most common) or a created Inbound filter. You may create your own inbound filters in the **Advanced** > **Inbound Filter** page.

Click **Save Settings** to save the current configuration.


D-Link
DIR-868L
SETUP
ADVANCED
TOOLS
STATUS
SUPPORT
VIRTUAL SERVER
PORT FORWARDING
APPLICATION RULES
QOS ENGINE
NETWORK FILTER
ACCESS CONTROL
WEBSITE FILTER
INBOUND FILTER
FIREWALL SETTINGS
ROUTING
ADVANCED WIRELESS
WI-FI PROTECTED SETUP
ADVANCED NETWORK
GUEST ZONE
IPV6 FIREWALL
IPV6 ROUTING
VIRTUAL SERVER
The Virtual Server option allows you to define a single public port on your router for redirection to an internal LAN IP Address and Private LAN port if required. This feature is useful for hosting online services such as FTP or Web Servers.
Save Settings
Don't Save Settings
24 - VIRTUAL SERVERS LIST
Remaining number of rules that can be created: 24
Port
Traffic Type
Name
IP Address
Application nam
Computer Name
Public Port
Private Port
Protocol
Both
Schedule
Alway
Inbound Filter
Allow A
Helpful Hints...
• Check the Application Name drop down menu for a list of predefined server types. If you select one of the predefined server types, click the arrow button next to the drop down menu to fill out the corresponding field.
• You can select a computer from the list of DHCP clients in the Computer Name drop down menu, or you can manually enter the IP address of the computer at which you would like to open the specified port.
• Select a schedule for when the virtual server will be enabled. If you do not see the schedule you need in the list of schedules, go to the Tools -> Schedules screen and create a new schedule.
• Select a filter that restricts the Internet hosts that can access this virtual server to hosts that you trust. If you do not see the filter you need in the list of filters, go to the Advanced -> Inbound Filter screen and create a new filter.
• More...
WIRELESS

Port Forwarding

This page will allow you to open a single port or a range of ports.

Name: Enter a name for the rule or select an application from the drop-down menu. Select an application and click to populate the fields.

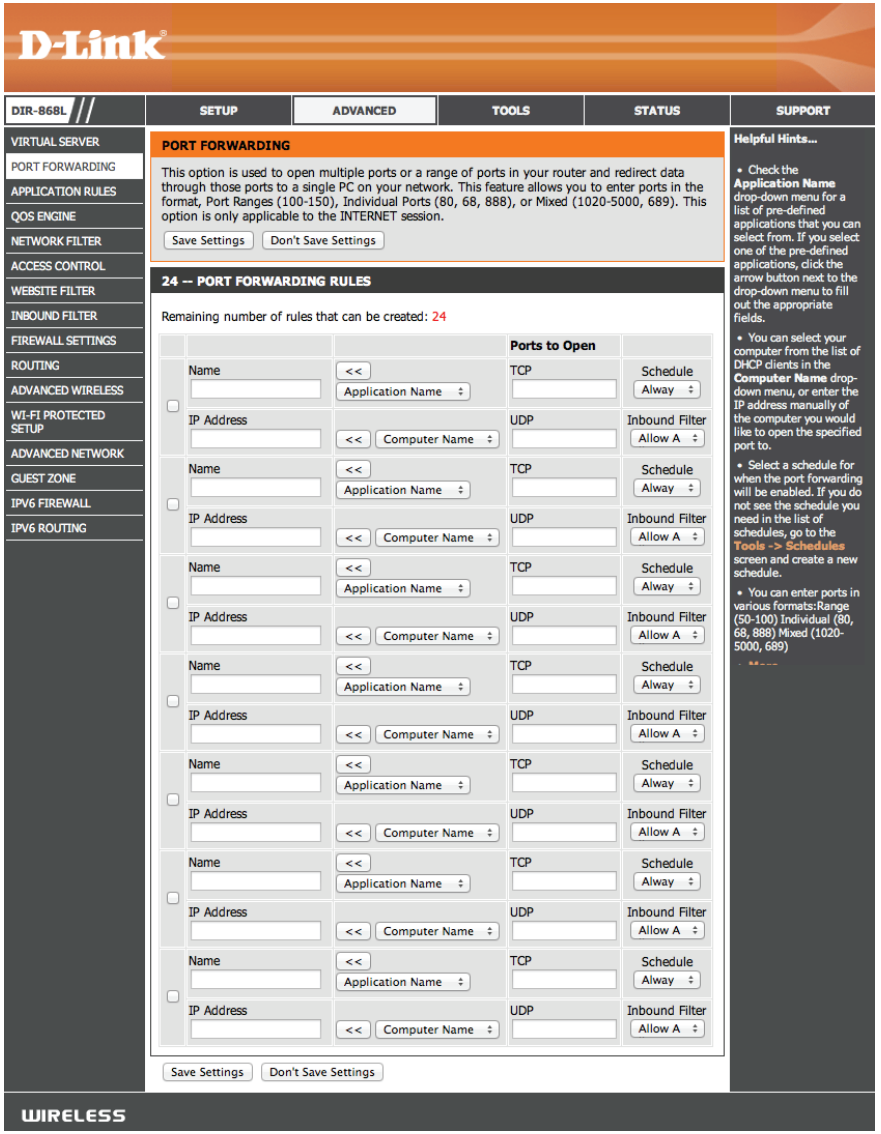
IP Address: Enter the IP address of the computer on your local network that you want to allow the incoming service to. If your computer is receiving an IP address automatically from the router (DHCP), you computer will be listed in the "Computer Name" drop-down menu. Select your computer and click **<<**.

TCP/UDP: Enter the TCP and/or UDP port or ports that you want to open. You can enter a single port or a range of ports. Separate ports with a common. Example: 24,1009,3000-4000

Schedule: The schedule of time when the Virtual Server Rule will be enabled. The schedule may be set to **Always**, which will allow the particular service to always be enabled. You can create your own times in the **Tools** > **Schedules** section.

Inbound Filter: Select **Allow All** (most common) or a created Inbound filter. You may create your own inbound filters in the **Advanced** > **Inbound Filter** page.

Click **Save Settings** to save the current configuration.


D-Link
DIR-868L
SETUP
ADVANCED
TOOLS
STATUS
SUPPORT
VIRTUAL SERVER
PORT FORWARDING
APPLICATION RULES
QOS ENGINE
NETWORK FILTER
ACCESS CONTROL
WEBSITE FILTER
INBOUND FILTER
FIREWALL SETTINGS
ROUTING
ADVANCED WIRELESS
WI-FI PROTECTED SETUP
ADVANCED NETWORK
GUEST ZONE
IPV6 FIREWALL
IPV6 ROUTING
PORT FORWARDING
This option is used to open multiple ports or a range of ports in your router and redirect data through those ports to a single PC on your network. This feature allows you to enter ports in the format, Port Ranges (100-150), Individual Ports (80, 68, 888), or Mixed (1020-5000, 689). This option is only applicable to the INTERNET session.
Save Settings
Don't Save Settings
24 -- PORT FORWARDING RULES
Remaining number of rules that can be created: 24
Ports to Open
Name
Application Name
TCP
Schedule
Alway
IP Address
Computer Name
UDP
Inbound Filter
Allow A
Helpful Hints...
• Check the Application Name drop-down menu for a list of pre-defined applications that you can select from. If you select one of the pre-defined applications, click the arrow button next to the drop-down menu to fill out the appropriate fields.
• You can select your computer from the list of DHCP clients in the Computer Name drop-down menu, or enter the IP address manually of the computer you would like to open the specified port to.
• Select a schedule for when the port forwarding will be enabled. If you do not see the schedule you need in the list of schedules, go to the Tools -> Schedules screen and create a new schedule.
• You can enter ports in various formats:Range (50-100) Individual (80, 68, 888) Mixed (1020-5000, 689)
WIRELESS

Application Rules

Some applications require multiple connections, such as Internet gaming, video conferencing, Internet telephony and others. These applications have difficulties working through NAT (Network Address Translation). Special Applications makes some of these applications work with the DIR-868L. If you need to run applications that require multiple connections, specify the port normally associated with an application in the "Trigger Port" field, select the protocol type as TCP or UDP, then enter the firewall (public) ports associated with the trigger port to open them for inbound traffic.

Name: Enter a name for the rule. You may select a pre-defined application from the drop-down menu and click.

Trigger: This is the port used to trigger the application. It can be either a single port or a range of ports.

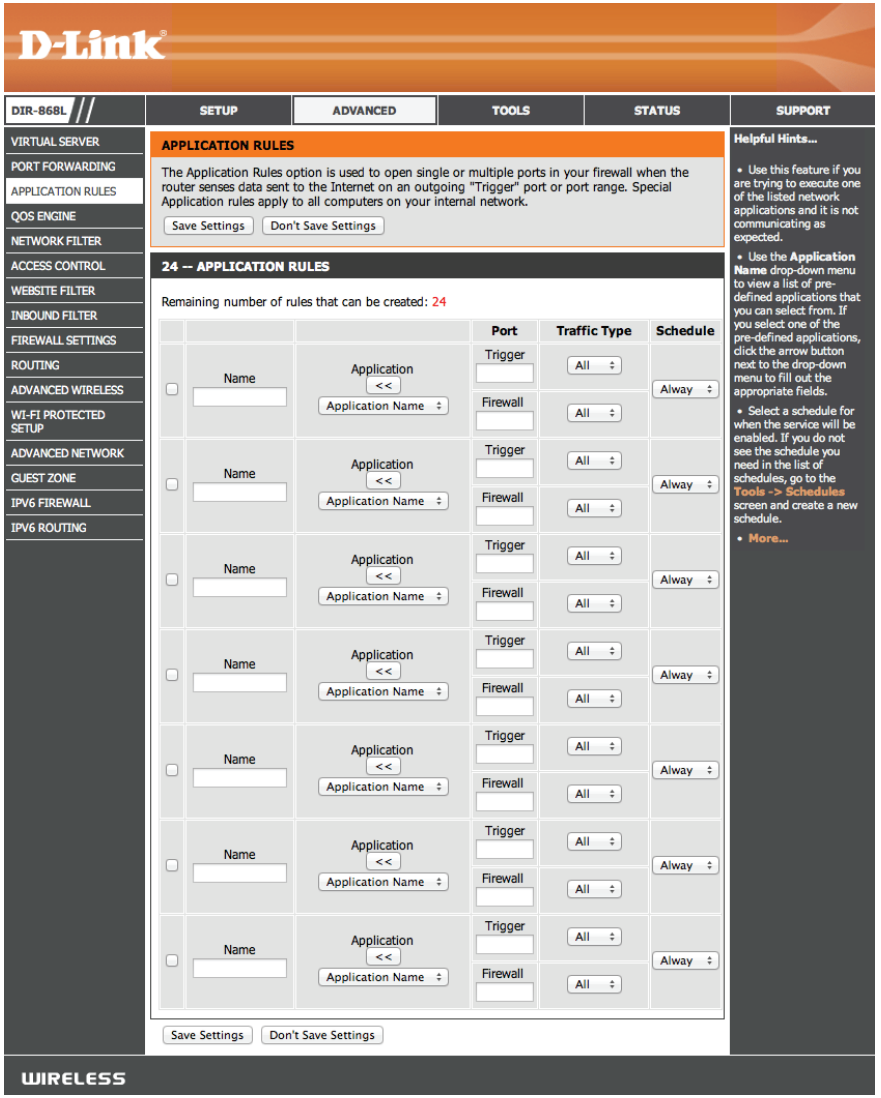
Traffic Type: Select the protocol of the trigger port (TCP, UDP, or Both).

Firewall: This is the port number on the Internet side that will be used to access the application. You may define a single port or a range of ports. You can use a comma to add multiple ports or port ranges.

Traffic Type: Select the protocol of the firewall port (TCP, UDP, or Both).

Schedule: The schedule of time when the Application Rule will be enabled. The schedule may be set to Always, which will allow the particular service to always be enabled. You can create your own times in the **Tools** > **Schedules** section.

Click **Save Settings** to save the current configuration.


D-Link
DIR-868L
SETUP
ADVANCED
TOOLS
STATUS
SUPPORT
VIRTUAL SERVER
PORT FORWARDING
APPLICATION RULES
QOS ENGINE
NETWORK FILTER
ACCESS CONTROL
WEBSITE FILTER
INBOUND FILTER
FIREWALL SETTINGS
ROUTING
ADVANCED WIRELESS
WI-FI PROTECTED SETUP
ADVANCED NETWORK
GUEST ZONE
IPV6 FIREWALL
IPV6 ROUTING
APPLICATION RULES
The Application Rules option is used to open single or multiple ports in your firewall when the router senses data sent to the Internet on an outgoing "Trigger" port or port range. Special Application rules apply to all computers on your internal network.
Save Settings
Don't Save Settings
24 -- APPLICATION RULES
Remaining number of rules that can be created: 24
Port
Traffic Type
Schedule
Name
Application
Application Name
Trigger
Firewall
All
Alway
Helpful Hints...
• Use this feature if you are trying to execute one of the listed network applications and it is not communicating as expected.
• Use the Application Name drop-down menu to view a list of pre-defined applications that you can select from. If you select one of the pre-defined applications, click the arrow button next to the drop-down menu to fill out the appropriate fields.
• Select a schedule for when the service will be enabled. If you do not see the schedule you need in the list of schedules, go to the Tools -> Schedules screen and create a new schedule.
• More...
WIRELESS

QoS Engine

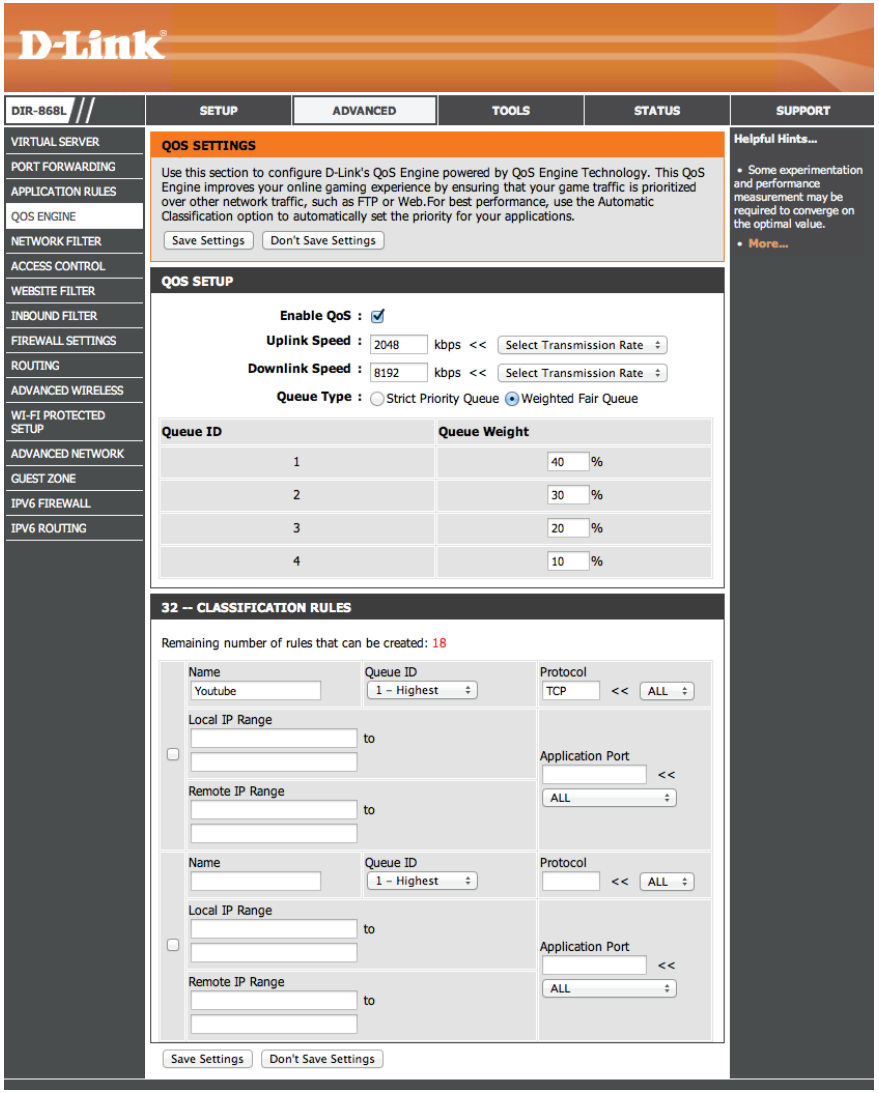
The QoS Engine option helps improve your network gaming performance by prioritizing applications. By default the QoS Engine settings are disabled and application priority is not classified automatically.

Enable QoS Engine: This option is disabled by default. Enable this option for better performance and experience with online games and other interactive applications, such as VoIP.

Uplink Speed: Using the drop-down menu, select the uplink speed of your Internet connection. ISPs often state speed as a download/upload pair (eg: 1.5 Mbps/284 Kbps). Using this example, you would enter 284.

Downlink Speed: Using the drop-down menu, select the downlink speed of your Internet connection.

Queue Type: Select the queueing method that you wish to use for the QoS engine. If you select **Strict Priority Queue**, the QoS engine will use preset priorities for each of the Queue IDs listed in the Classification Rules section below. If you select **Weighted Fair Queue**, you can assign a percentage of the total weighting to be assigned to each of the Queue IDs used in the Classification Rules section below.



Classification Rules: A QoS Engine Rule identifies a specific message flow and assigns a priority to that flow. For most applications, automatic classification will be adequate, and specific QoS Engine Rules will not be required.

The QoS Engine supports overlaps between rules, where more than one rule can match for a specific message flow. If more than one rule is found to match, the rule with the highest priority will be used.

Name: Create a name for the rule that is meaningful to you.

Queue ID: Select a desired priority level for the rule from the drop-down menu. This priority level will be used to determine the importance of this rule according to the priority rule selected in the QoS Setup above.

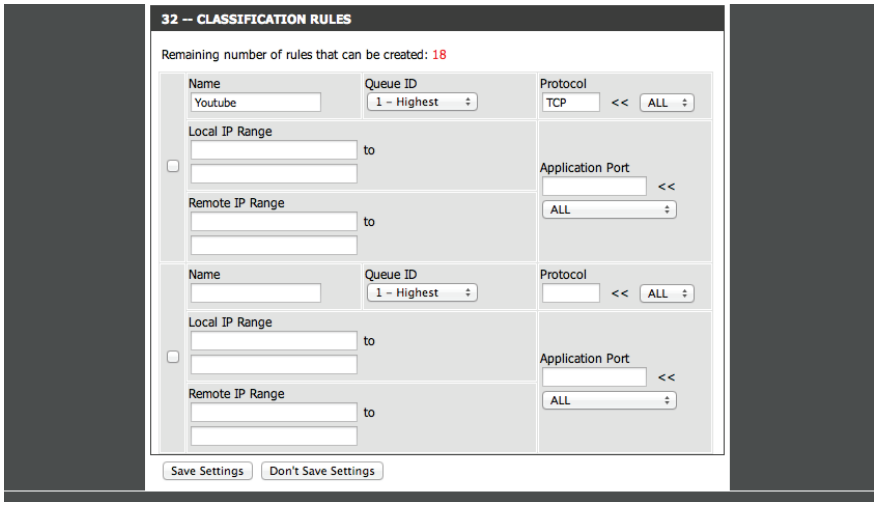
Protocol: The protocol used by the application.

Local IP Range: The rule applies to a flow of messages whose LAN-side IP address falls within the range set here.

Application Port: Select the application port for this rule from the drop-down menu.

Remote IP Range: The rule applies to a flow of messages whose WAN-side IP address falls within the range set here.

Click **Save Settings** to save the current configuration.



Network Filters

Use MAC (Media Access Control) Filters to allow or deny LAN (Local Area Network) computers by their MAC addresses from accessing the network. You can either manually add a MAC address or select the MAC address from the list of clients that are currently connected to the Broadband Router.

Configure MAC Filtering: Select **Turn MAC Filtering Off**, **Allow MAC addresses listed below**, or **Deny MAC addresses listed below** from the drop-down menu.

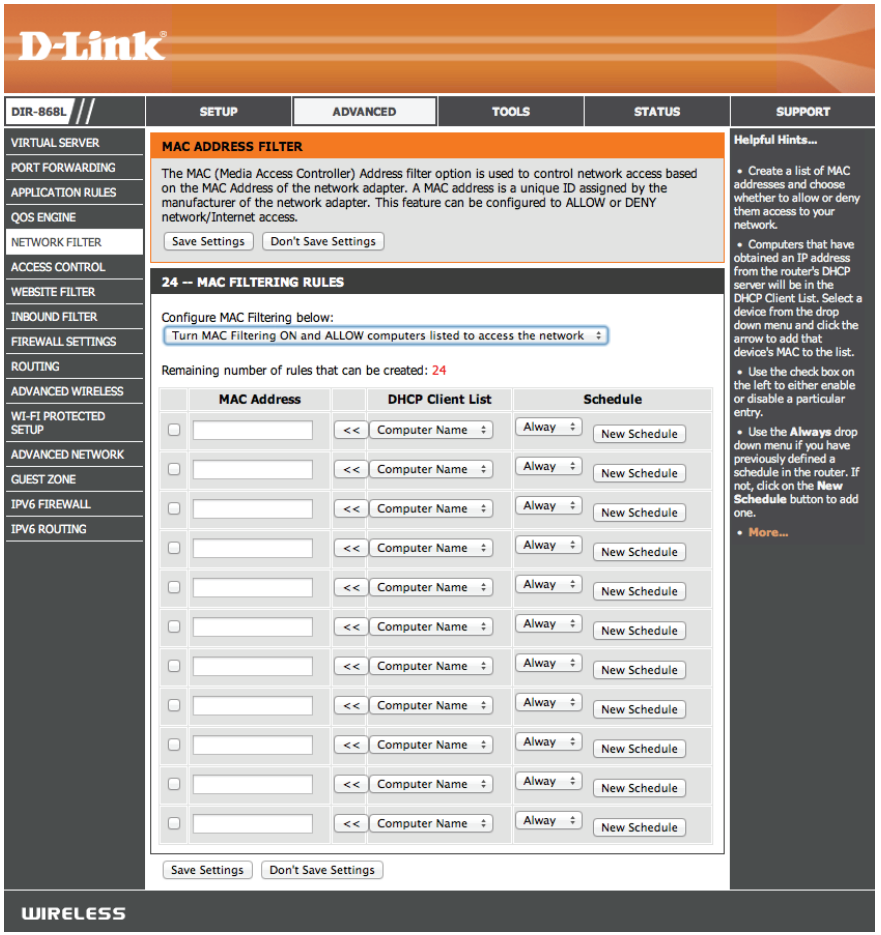
MAC Address: Enter the MAC address you would like to filter.

To find the MAC address on a computer, please refer to the *Networking Basics* section in this manual.

DHCP Client List: Select a DHCP client from the drop-down menu and click **<<** to copy that MAC Address.

Schedule: Select a schedule for the MAC filtering rule. Click **New Schedule** to create a new schedule.

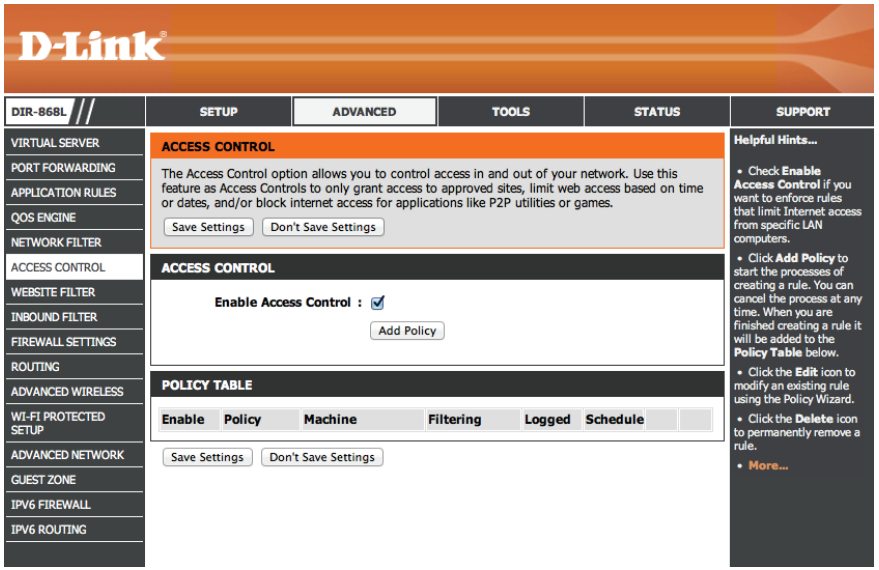
Click **Save Settings** to save the current configuration.


D-Link
DIR-868L
SETUP
ADVANCED
TOOLS
STATUS
SUPPORT
VIRTUAL SERVER
PORT FORWARDING
APPLICATION RULES
QOS ENGINE
NETWORK FILTER
ACCESS CONTROL
WEBSITE FILTER
INBOUND FILTER
FIREWALL SETTINGS
ROUTING
ADVANCED WIRELESS
WI-FI PROTECTED SETUP
ADVANCED NETWORK
GUEST ZONE
IPV6 FIREWALL
IPV6 ROUTING
MAC ADDRESS FILTER
The MAC (Media Access Controller) Address filter option is used to control network access based on the MAC Address of the network adapter. A MAC address is a unique ID assigned by the manufacturer of the network adapter. This feature can be configured to ALLOW or DENY network/Internet access.
Save Settings
Don't Save Settings
24 -- MAC FILTERING RULES
Configure MAC Filtering below:
Turn MAC Filtering ON and ALLOW computers listed to access the network
Remaining number of rules that can be created: 24
MAC Address
DHCP Client List
Schedule
<<
Computer Name
Always
New Schedule
Save Settings
Don't Save Settings
Helpful Hints...
• Create a list of MAC addresses and choose whether to allow or deny them access to your network.
• Computers that have obtained an IP address from the router's DHCP server will be in the DHCP Client List. Select a device from the drop down menu and click the arrow to add that device's MAC to the list.
• Use the check box on the left to either enable or disable a particular entry.
• Use the Always drop down menu if you have previously defined a schedule in the router. If not, click on the New Schedule button to add one.
• More...
WIRELESS

Access Control

The Access Control section allows you to control access in and out of your network. Use this feature as Parental Controls to only grant access to approved sites, limit web access based on time or dates, and/or block access from applications like P2P utilities or games.

Add Policy: Click the **Add Policy** button to start the Access Control Wizard.


D-Link
DIR-868L
SETUP
ADVANCED
TOOLS
STATUS
SUPPORT
VIRTUAL SERVER
PORT FORWARDING
APPLICATION RULES
QOS ENGINE
NETWORK FILTER
ACCESS CONTROL
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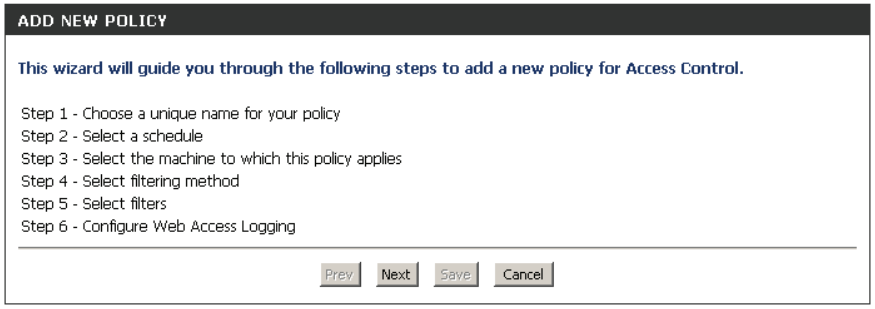
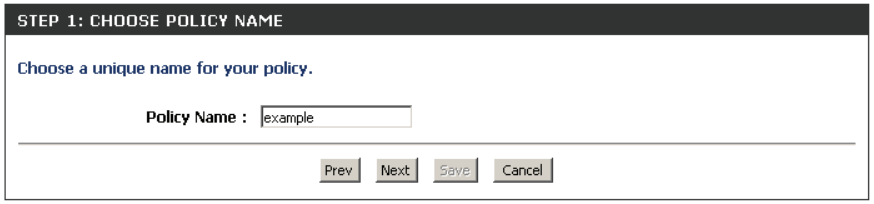
INBOUND FILTER
FIREWALL SETTINGS
ROUTING
ADVANCED WIRELESS
WI-FI PROTECTED SETUP
ADVANCED NETWORK
GUEST ZONE
IPV6 FIREWALL
IPV6 ROUTING
ACCESS CONTROL
The Access Control option allows you to control access in and out of your network. Use this feature as Access Controls to only grant access to approved sites, limit web access based on time or dates, and/or block internet access for applications like P2P utilities or games.
Save Settings
Don't Save Settings
ACCESS CONTROL
Enable Access Control :
Add Policy
POLICY TABLE
Enable
Policy
Machine
Filtering
Logged
Schedule
Save Settings
Don't Save Settings
Helpful Hints...
• Check Enable Access Control if you want to enforce rules that limit Internet access from specific LAN computers.
• Click Add Policy to start the processes of creating a rule. You can cancel the process at any time. When you are finished creating a rule it will be added to the Policy Table below.
• Click the Edit icon to modify an existing rule using the Policy Wizard.
• Click the Delete icon to permanently remove a rule.
• More...

Access Control Wizard

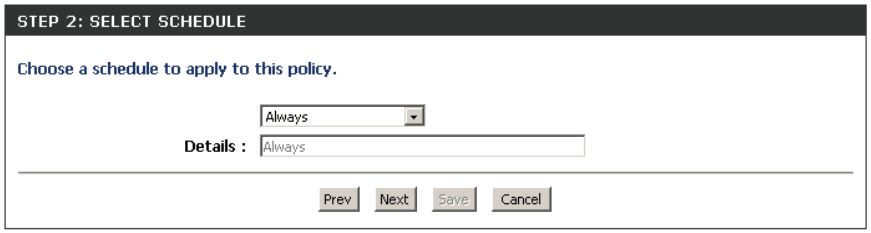
Click **Next** to continue with the wizard.


ADD NEW POLICY
This wizard will guide you through the following steps to add a new policy for Access Control.
Step 1 - Choose a unique name for your policy
Step 2 - Select a schedule
Step 3 - Select the machine to which this policy applies
Step 4 - Select filtering method
Step 5 - Select filters
Step 6 - Configure Web Access Logging
Prev
Next
Save
Cancel

Enter a name for the policy and then click **Next** to continue.

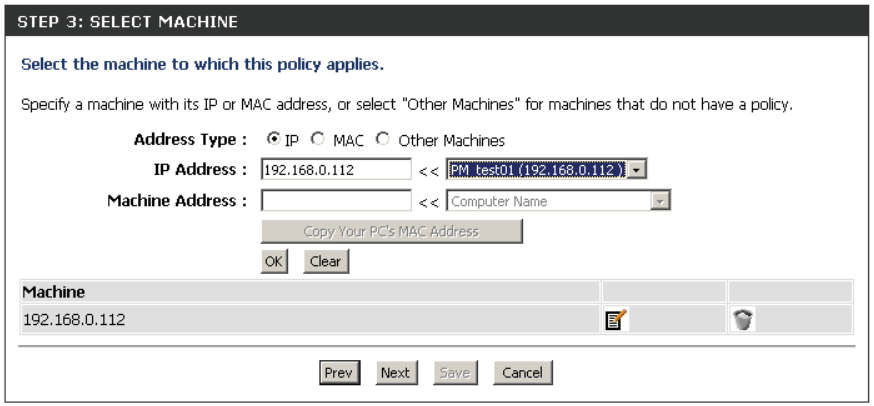


Select a schedule (I.E. Always) from the drop-down menu and then click **Next** to continue.

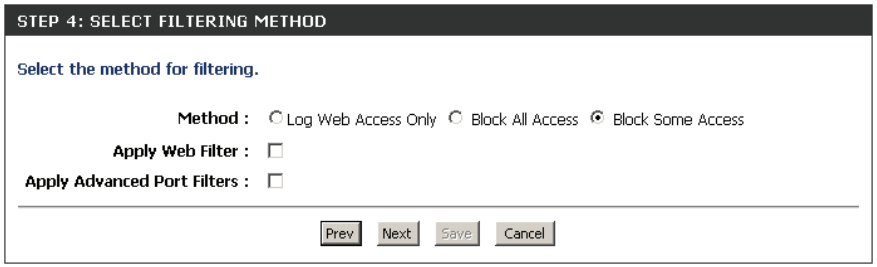


Enter the following information and then click **Next** to continue.

- **Address Type** - Select IP address, MAC address, or Other Machines.
- **IP Address** - Enter the IP address of the computer you want to apply the rule to.
- **Machine Address** - Enter the PC MAC address (i.e. 00:00.00.00.00).

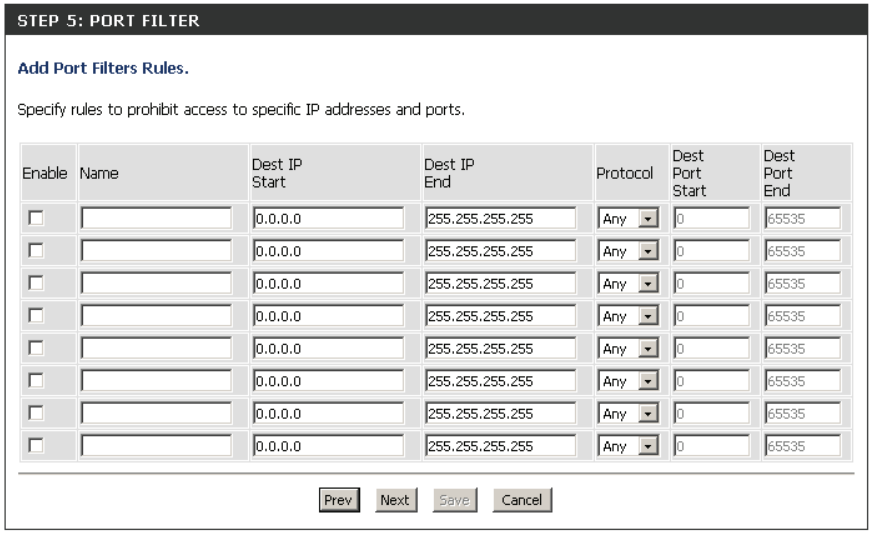

STEP 3: SELECT MACHINE
Select the machine to which this policy applies.
Specify a machine with its IP or MAC address, or select "Other Machines" for machines that do not have a policy.
Address Type : IP MAC Other Machines
IP Address : 192.168.0.112 << PM_test01 (192.168.0.112)
Machine Address : << Computer Name
Copy Your PC's MAC Address
OK
Clear
Machine
192.168.0.112
Prev
Next
Save
Cancel

Select the filtering method and then click **Next** to continue.



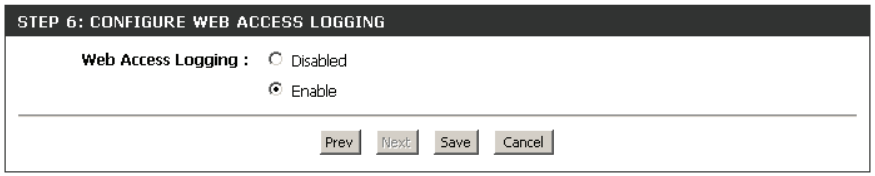
Enter the rule:

Enable - Check to enable the rule.
Name - Enter a name for your rule.
Dest IP Start - Enter the starting IP address.
Dest IP End - Enter the ending IP address.
Protocol - Select the protocol.
Dest Port Start - Enter the starting port number.
Dest Port End - Enter the ending port number.

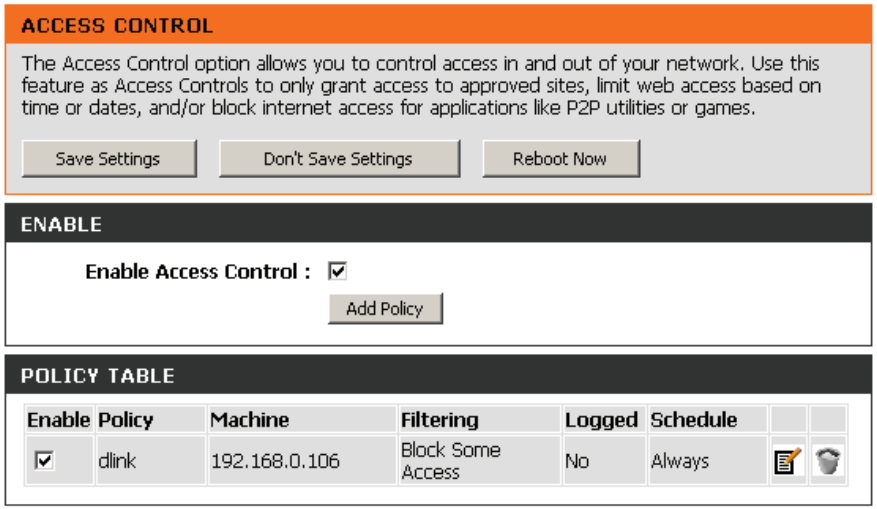


To enable web logging, click **Enable**.

Click **Save** to save the access control rule.



Your newly created policy will now show up under **Policy Table**.

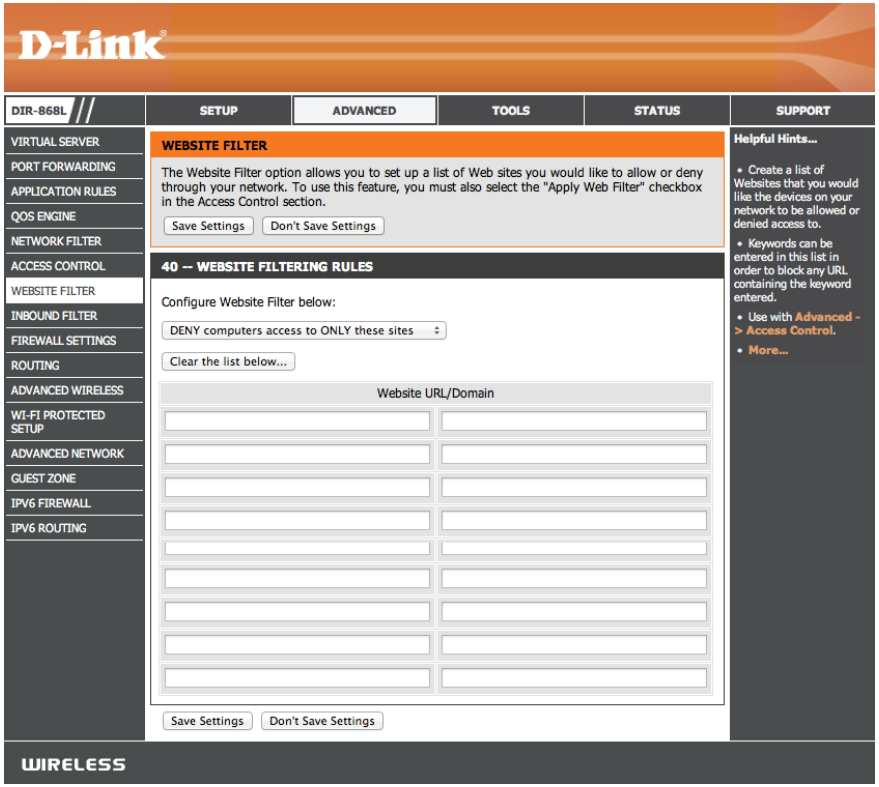


Website Filters

Website Filters are used to allow you to set up a list of Web sites that can be viewed by multiple users through the network. To use this feature select to **Allow** or **Deny**, enter the domain or website and click **Save Settings**. You must also select **Apply Web Filter** under the *Access Control* section.

Configure Website Filter: Select either **DENY computers access to ONLY these sites** or **ALLOW computers access to ONLY these sites**.

Website URL/ Domain: Enter the keywords or URLs that you want to allow or block. Click **Save Settings**.


D-Link
DIR-868L
SETUP
ADVANCED
TOOLS
STATUS
SUPPORT
VIRTUAL SERVER
PORT FORWARDING
APPLICATION RULES
QOS ENGINE
NETWORK FILTER
ACCESS CONTROL
WEBSITE FILTER
INBOUND FILTER
FIREWALL SETTINGS
ROUTING
ADVANCED WIRELESS
WI-FI PROTECTED SETUP
ADVANCED NETWORK
GUEST ZONE
IPV6 FIREWALL
IPV6 ROUTING
WEBSITE FILTER
The Website Filter option allows you to set up a list of Web sites you would like to allow or deny through your network. To use this feature, you must also select the "Apply Web Filter" checkbox in the Access Control section.
Save Settings
Don't Save Settings
40 -- WEBSITE FILTERING RULES
Configure Website Filter below:
DENY computers access to ONLY these sites
Clear the list below...
Website URL/Domain
Save Settings
Don't Save Settings
Helpful Hints...
• Create a list of Websites that you would like the devices on your network to be allowed or denied access to.
• Keywords can be entered in this list in order to block any URL containing the keyword entered.
• Use with Advanced -> Access Control.
• More...
WIRELESS

Inbound Filter

The Inbound Filter option is an advanced method of controlling data received from the Internet. With this feature you can configure inbound data filtering rules that control data based on an IP address range. Inbound Filters can be used with Virtual Server, Port Forwarding, or Remote Administration features.

Name: Enter a name for the inbound filter rule.

Action: Select **Allow** or **Deny**.

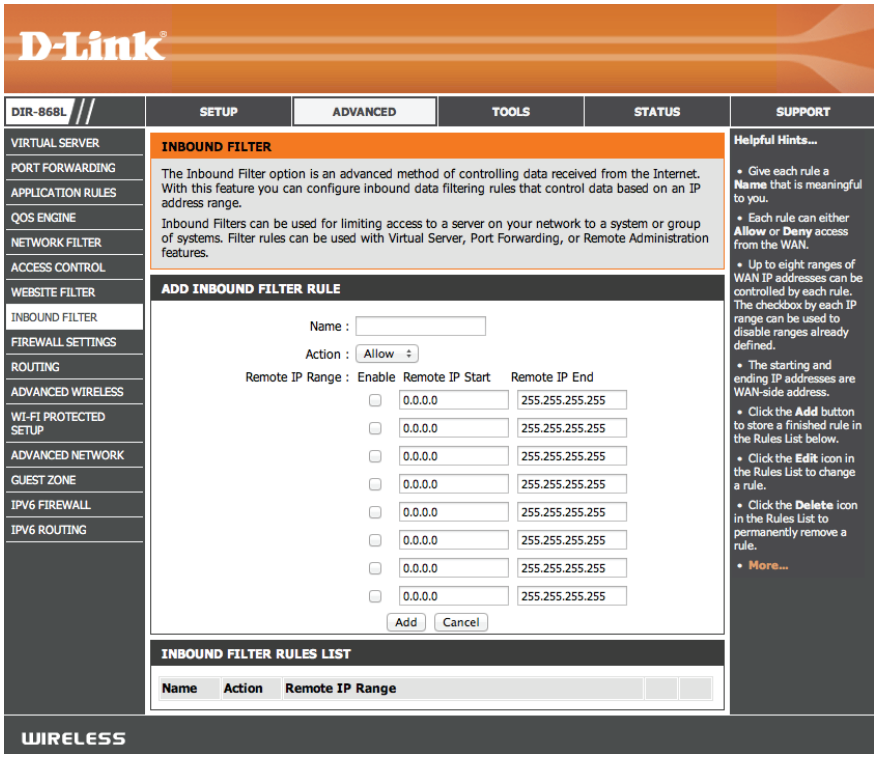
Enable: Check to enable rule.

Remote IP Start: Enter the starting IP address. Enter 0.0.0.0 if you do not want to specify an IP range.

Remote IP End: Enter the ending IP address. Enter 255.255.255.255 if you do not want to specify and IP range.

Add: Click the **Add** button to apply your settings. You must click **Save Settings** at the top to save the settings.

Inbound Filter Rules List: This section will list any rules that are created. You may click the **Edit** icon to change the settings or enable/disable the rule, or click the **Delete** icon to remove the rule.


D-Link
DIR-868L
SETUP
ADVANCED
TOOLS
STATUS
SUPPORT
VIRTUAL SERVER
PORT FORWARDING
APPLICATION RULES
QOS ENGINE
NETWORK FILTER
ACCESS CONTROL
WEBSITE FILTER
INBOUND FILTER
FIREWALL SETTINGS
ROUTING
ADVANCED WIRELESS
WI-FI PROTECTED SETUP
ADVANCED NETWORK
GUEST ZONE
IPV6 FIREWALL
IPV6 ROUTING
INBOUND FILTER
The Inbound Filter option is an advanced method of controlling data received from the Internet. With this feature you can configure inbound data filtering rules that control data based on an IP address range.
Inbound Filters can be used for limiting access to a server on your network to a system or group of systems. Filter rules can be used with Virtual Server, Port Forwarding, or Remote Administration features.
ADD INBOUND FILTER RULE
Name :
Action : Allow
Remote IP Range : Enable Remote IP Start Remote IP End
0.0.0.0 255.255.255.255
Add Cancel
INBOUND FILTER RULES LIST
Name Action Remote IP Range
Helpful Hints...
• Give each rule a Name that is meaningful to you.
• Each rule can either Allow or Deny access from the WAN.
• Up to eight ranges of WAN IP addresses can be controlled by each rule. The checkbox by each IP range can be used to disable ranges already defined.
• The starting and ending IP addresses are WAN-side address.
• Click the Add button to store a finished rule in the Rules List below.
• Click the Edit icon in the Rules List to change a rule.
• Click the Delete icon in the Rules List to permanently remove a rule.
• More...
WIRELESS

Firewall Settings

A firewall protects your network from the outside world. The DIR-868L offers a firewall type functionality. The SPI feature helps prevent cyber attacks. Sometimes you may want a computer exposed to the outside world for certain types of applications. If you choose to expose a computer, you can enable DMZ. DMZ is short for Demilitarized Zone. This option will expose the chosen computer completely to the outside world.

Enable SPI: SPI (Stateful Packet Inspection, also known as dynamic packet filtering) helps to prevent cyber attacks by tracking more state per session. It validates that the traffic passing through the session conforms to the protocol.

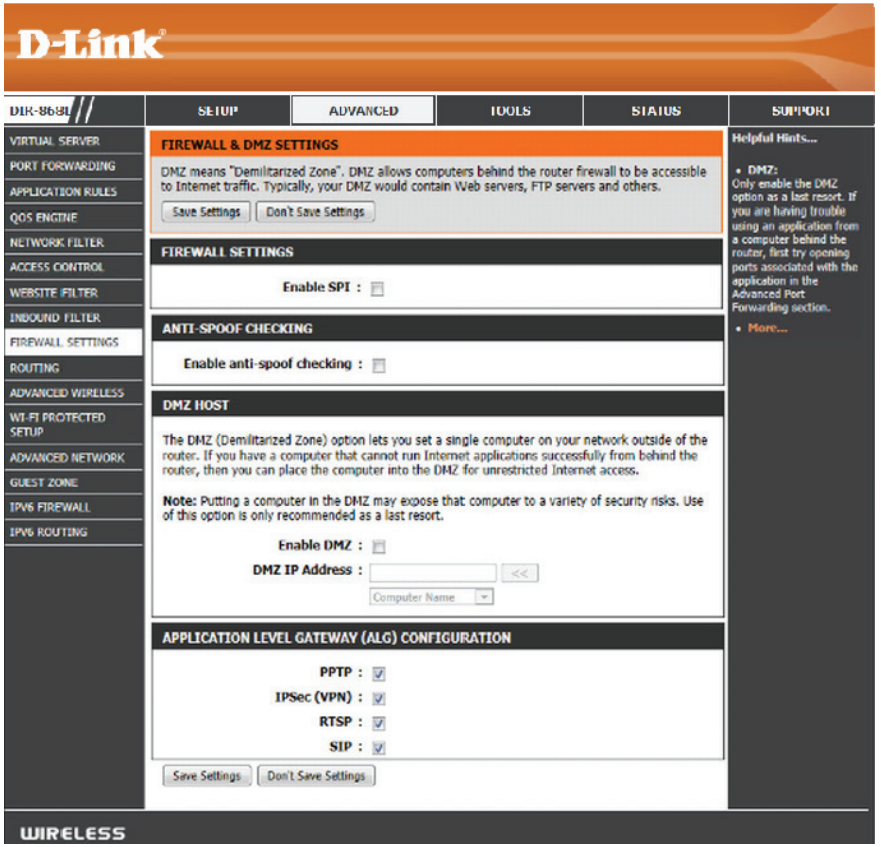
Anti-Spoof Check: Enable this feature to protect your network from certain kinds of "spoofing" attacks.

Enable DMZ: If an application has trouble working from behind the router, you can expose one computer to the Internet and run the application on that computer.

Note: *Placing a computer in the DMZ may expose that computer to a variety of security risks. Use of this option is only recommended as a last resort.*

DMZ IP Address: Specify the IP address of the computer on the LAN that you want to have unrestricted Internet communication. If this computer obtains it's IP address automatically using DHCP, be sure to make a static reservation on the **Setup** > **Network Settings** page so that the IP address of the DMZ machine does not change.

PPTP: Allows multiple machines on the LAN to connect to their corporate network using PPTP protocol.


D-Link
DIR-868L
SETUP
ADVANCED
TOOLS
STATUS
SUPPORT
VIRTUAL SERVER
PORT FORWARDING
APPLICATION RULES
QOS ENGINE
NETWORK FILTER
ACCESS CONTROL
WEBSITE FILTER
INBOUND FILTER
FIREWALL SETTINGS
ROUTING
ADVANCED WIRELESS
WI-FI PROTECTED SETUP
ADVANCED NETWORK
GUEST ZONE
IPV6 FIREWALL
IPV6 ROUTING
FIREWALL & DMZ SETTINGS
DMZ means "Demilitarized Zone". DMZ allows computers behind the router firewall to be accessible to Internet traffic. Typically, your DMZ would contain Web servers, FTP servers and others.
Save Settings
Don't Save Settings
FIREWALL SETTINGS
Enable SPI :
ANTI-SPOOF CHECKING
Enable anti-spoof checking :
DMZ HOST
The DMZ (Demilitarized Zone) option lets you set a single computer on your network outside of the router. If you have a computer that cannot run Internet applications successfully from behind the router, then you can place the computer into the DMZ for unrestricted Internet access.
Note: Putting a computer in the DMZ may expose that computer to a variety of security risks. Use of this option is only recommended as a last resort.
Enable DMZ :
DMZ IP Address :
Computer Name
APPLICATION LEVEL GATEWAY (ALG) CONFIGURATION
PPTP :
IPSec (VPN) :
RTSP :
SIP :
Save Settings
Don't Save Settings
Helpful Hints...
DMZ:
Only enable the DMZ option as a last resort. If you are having trouble using an application from a computer behind the router, first try opening ports associated with the application in the Advanced Port Forwarding section.
More...
WIRELESS

IPSEC (VPN): Allows multiple VPN clients to connect to their corporate network using IPSec. Some VPN clients support traversal of IPSec through NAT. This ALG may interfere with the operation of such VPN clients. If you are having trouble connecting with your corporate network, try turning this ALG off. Please check with the system administrator of your corporate network whether your VPN client supports NAT traversal.

RTSP: Allows applications that uses Real Time Streaming Protocol to receive streaming media from the Internet. QuickTime and Real Player are some of the common applications using this protocol.

SIP: Allows devices and applications using VoIP (Voice over IP) to communicate across NAT. Some VoIP applications and devices have the ability to discover NAT devices and work around them. This ALG may interfere with the operation of such devices. If you are having trouble making VoIP calls, try turning this ALG off.

Click **Save Settings** to save the current configuration.

Routing

The Routing option is an advanced method of customizing specific routes of data through your network.

Checkbox: Check the box to enable the routing rule.

Name: Enter a name for your route.

Destination IP: Enter the IP address of packets that will take this route.

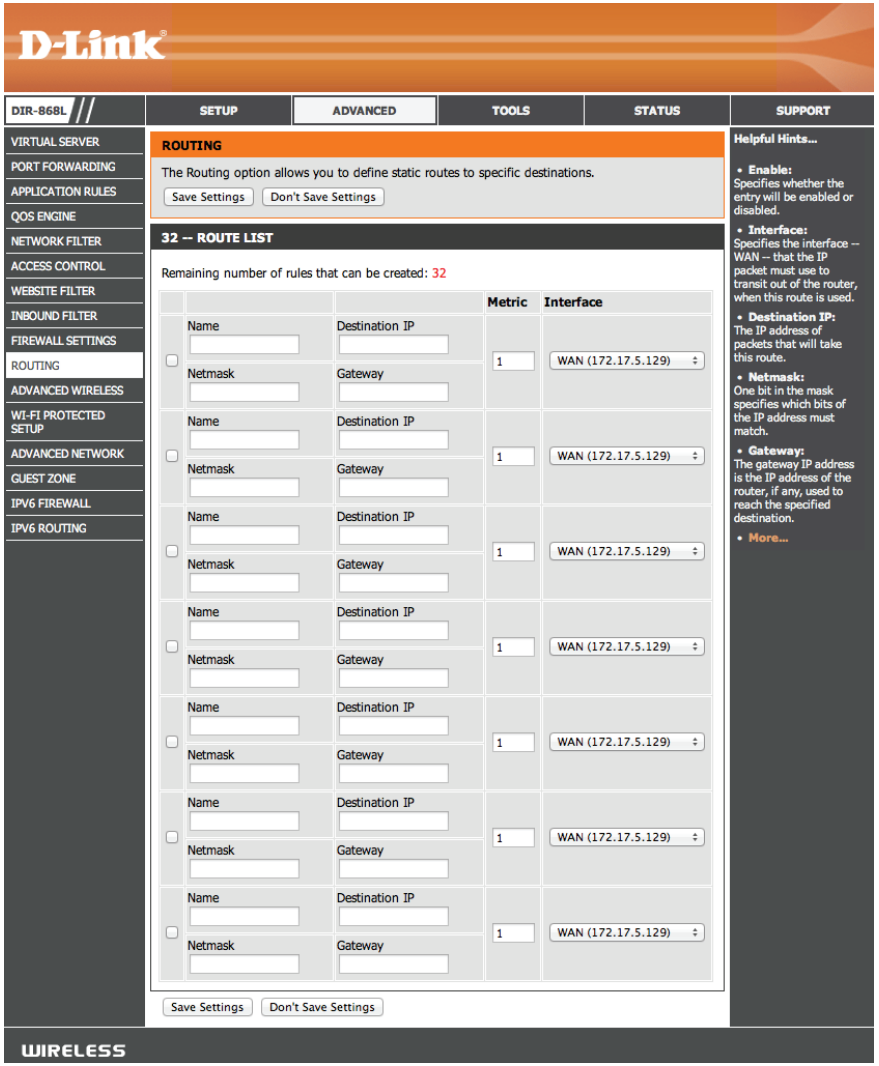
Netmask: Enter the netmask of the route, please note that the octets must match your destination IP address.

Gateway: Enter your next hop gateway to be taken if this route is used.

Metric: The route metric is a value from 1 to 16 that indicates the cost of using this route. A value 1 is the lowest cost and 15 is the highest cost.

Interface: Select the interface that the IP packet must use to transit out of the router when this route is used.

Click **Save Settings** to save the current configuration.



Advanced Wireless

This page allows you to change some of the advanced wireless settings of the DIR-868L. It is recommended that you only change these settings if you are familiar with their functions and proper settings, or are instructed to do so.

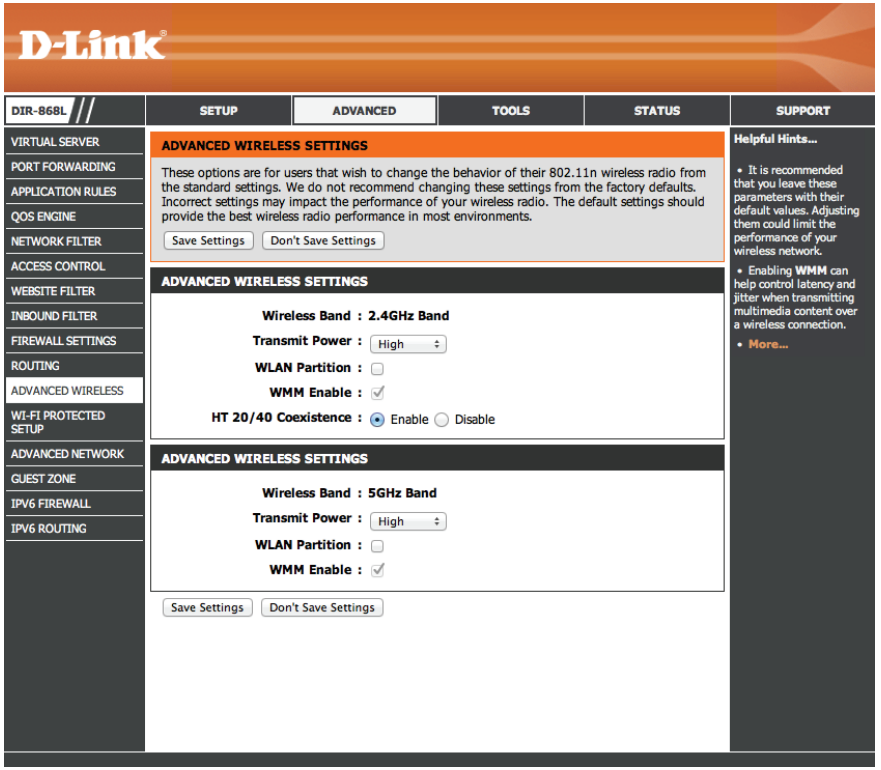
Wireless Band: This will display which radio band the following settings will be used for. This top box will be the settings for the 2.4 GHz band.

Transmit Power: Set the transmit power of the antennas for the 2.4 GHz band.

WLAN Partition: This enables 802.11d operation. 802.11d is a wireless specification developed to allow implementation of wireless networks in countries that cannot use the 802.11 standard. This feature should only be enabled if you are in a country that requires it.

WMM Enable: WMM is QoS for your wireless network. This will improve the quality of video and voice applications for your wireless clients.

HT20/40 Coexistence: Enable this option to reduce interference from other wireless networks in your area. If the channel width is operating at 40 MHz and there is another wireless network's channel over-lapping and causing interference, the router will automatically change to 20 MHz.


D-Link
DIR-868L
SETUP
ADVANCED
TOOLS
STATUS
SUPPORT
VIRTUAL SERVER
PORT FORWARDING
APPLICATION RULES
QOS ENGINE
NETWORK FILTER
ACCESS CONTROL
WEBSITE FILTER
INBOUND FILTER
FIREWALL SETTINGS
ROUTING
ADVANCED WIRELESS
WI-FI PROTECTED SETUP
ADVANCED NETWORK
GUEST ZONE
IPV6 FIREWALL
IPV6 ROUTING
ADVANCED WIRELESS SETTINGS
These options are for users that wish to change the behavior of their 802.11n wireless radio from the standard settings. We do not recommend changing these settings from the factory defaults. Incorrect settings may impact the performance of your wireless radio. The default settings should provide the best wireless radio performance in most environments.
Save Settings
Don't Save Settings
ADVANCED WIRELESS SETTINGS
Wireless Band : 2.4GHz Band
Transmit Power : High
WLAN Partition :
WMM Enable :
HT 20/40 Coexistence : Enable Disable
ADVANCED WIRELESS SETTINGS
Wireless Band : 5GHz Band
Transmit Power : High
WLAN Partition :
WMM Enable :
Save Settings
Don't Save Settings
Helpful Hints...
• It is recommended that you leave these parameters with their default values. Adjusting them could limit the performance of your wireless network.
• Enabling WMM can help control latency and jitter when transmitting multimedia content over a wireless connection.
• More...

Wireless Band: This will display which radio band settings will be used. This top box will be the settings for the 5 GHz band.

Transmit Power: Set the transmit power of the antennas for the 5 GHz band.

WLAN Partition: This enables 802.11d operation. 802.11d is a wireless specification developed to allow implementation of wireless networks in countries that cannot use the 802.11 standard. This feature should only be enabled if you are in a country that requires it.

WMM Enable: WMM is QoS for your wireless network. This will improve the quality of video and voice applications for your wireless clients.

Click **Save Settings** to save the current configuration.

Wi-Fi Protected Setup

Wi-Fi Protected Setup (WPS) System is a simplified method for securing your wireless network during the "Initial setup" as well as the "Add New Device" processes. The Wi-Fi Alliance (WFA) has certified it across different products as well as manufacturers. The process is just as easy as pressing a button for the Push-Button Method or correctly entering the 8-digit code for the PIN Code Method. The time reduction in setup and ease of use are quite beneficial, and the highest wireless security setting of WPA2 is automatically used.

Enable: Enable the Wi-Fi Protected Setup feature.

Note: *if this option is unchecked, the WPS button on the side of the router will be disabled.*

Lock WPS-PIN Setup: Check to disable the option of configuring the WPS PIN options.

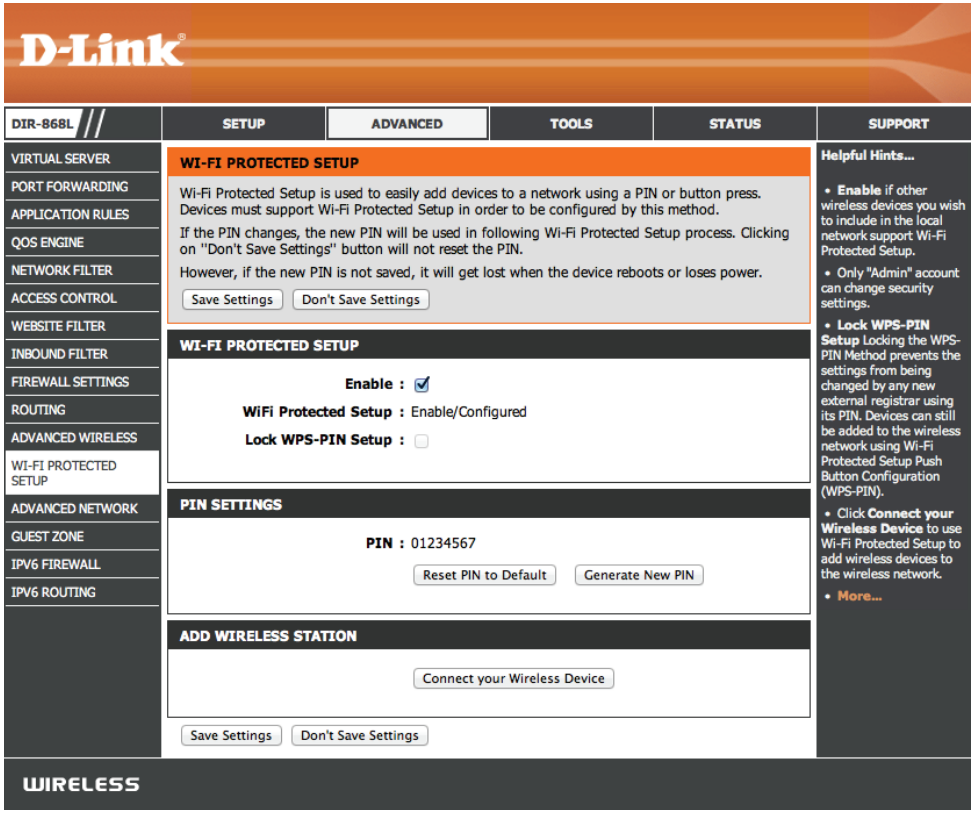
PIN Settings: A PIN is a unique number that can be used to add the router to an existing network or to create a new network. Only the Administrator ("admin" account) can change or reset the PIN.

Current PIN: Shows the current PIN.

Generate New PIN: Create a random number that is a valid PIN. This becomes the router's PIN. You can then copy this PIN to the user interface of the wireless client.

Reset PIN to Default: Restore the default PIN of the router.

Click **Save Settings** to save the current configuration.


D-Link
DIR-868L
SETUP
ADVANCED
TOOLS
STATUS
SUPPORT
VIRTUAL SERVER
PORT FORWARDING
APPLICATION RULES
QOS ENGINE
NETWORK FILTER
ACCESS CONTROL
WEBSITE FILTER
INBOUND FILTER
FIREWALL SETTINGS
ROUTING
ADVANCED WIRELESS
WI-FI PROTECTED SETUP
ADVANCED NETWORK
GUEST ZONE
IPV6 FIREWALL
IPV6 ROUTING
WI-FI PROTECTED SETUP
Wi-Fi Protected Setup is used to easily add devices to a network using a PIN or button press. Devices must support Wi-Fi Protected Setup in order to be configured by this method.
If the PIN changes, the new PIN will be used in following Wi-Fi Protected Setup process. Clicking on "Don't Save Settings" button will not reset the PIN.
However, if the new PIN is not saved, it will get lost when the device reboots or loses power.
Save Settings
Don't Save Settings
WI-FI PROTECTED SETUP
Enable :
WiFi Protected Setup : Enable/Configured
Lock WPS-PIN Setup :
PIN SETTINGS
PIN : 01234567
Reset PIN to Default
Generate New PIN
ADD WIRELESS STATION
Connect your Wireless Device
Save Settings
Don't Save Settings
Helpful Hints...
• Enable if other wireless devices you wish to include in the local network support Wi-Fi Protected Setup.
• Only "Admin" account can change security settings.
• Lock WPS-PIN Setup Locking the WPS-PIN Method prevents the settings from being changed by any new external registrar using its PIN. Devices can still be added to the wireless network using Wi-Fi Protected Setup Push Button Configuration (WPS-PIN).
• Click Connect your Wireless Device to use Wi-Fi Protected Setup to add wireless devices to the wireless network.
• More...
WIRELESS

Add Wireless Station: This Wizard helps you add wireless devices to the wireless network.

The wizard will either display the wireless network settings to guide you through manual configuration, prompt you to enter the PIN for the device, or ask you to press the configuration button on the device. If the device supports Wi-Fi Protected Setup and has a configuration button, you can add it to the network by pressing the configuration button on the device and then the on the router within 60 seconds. The status LED on the router will flash three times if the device has been successfully added to the network.

There are several ways to add a wireless device to your network. A "registrar" controls access to the wireless network. A registrar only allows devices onto the wireless network if you have entered the PIN, or pressed a special Wi-Fi Protected Setup button on the device. The router acts as a registrar for the network, although other devices may act as a registrar as well.

Click to start the wizard and turn to page 41.

WPS Button

You can also simply press the WPS button on the side of the router, and then press the WPS button on your wireless client within 120 seconds to automatically connect without logging into the router.

Refer to page 115 for more information.

Advanced Network

This page allows you to change some of the advanced network settings of the DIR-868L. It is recommended that you only change these settings if you are familiar with their functions and proper settings, or are instructed to do so.

Enable UPnP: To use the Universal Plug and Play (UPnP™) feature click on **Enabled**. UPnP provides compatibility with networking equipment, software and peripherals.

WAN Ping: Checking the box will allow the DIR-868L to respond to pings. Unchecking the box may provide some extra security from hackers.

WAN Ping Inbound Filter: Select from the drop-down menu if you would like to apply the Inbound Filter to the WAN ping. Refer to the Inbound Filters section for more information.

WAN Port Speed: You may set the port speed of the Internet port to 10 Mbps, 100 Mbps, 1000 Mbps, or Auto (recommended).

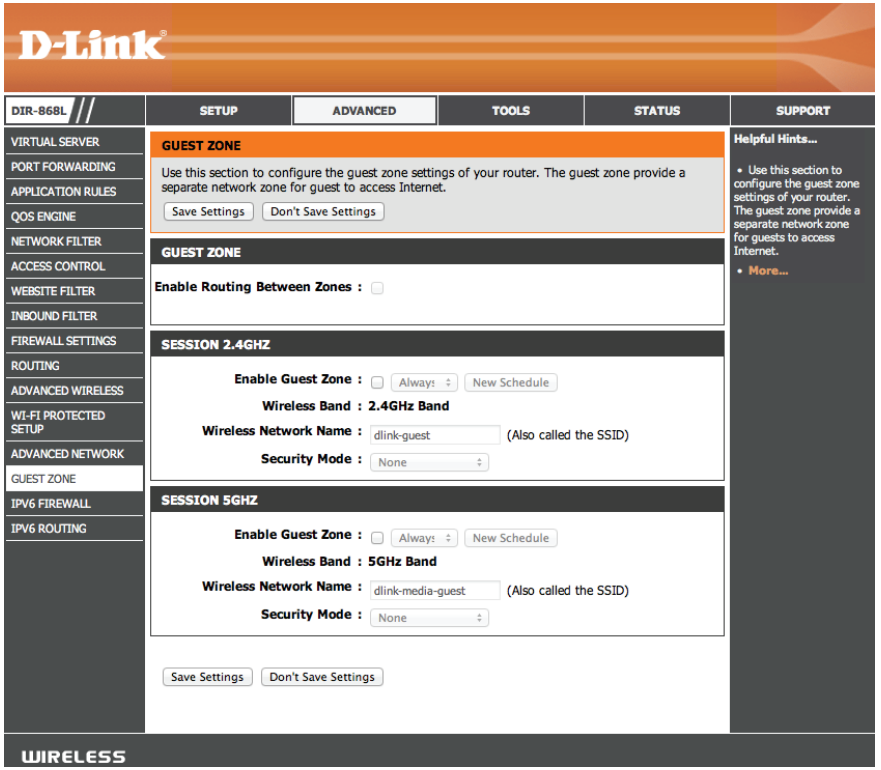
Enable IPV4 Multicast Streams: Check the box to allow multicast traffic to pass through the router from the Internet (IPv4).

Enable IPV6 Multicast Streams: Check the box to allow multicast traffic to pass through the router from the Internet (IPv6).

D-Link
DIR-868L
SETUP
ADVANCED
TOOLS
STATUS
SUPPORT
VIRTUAL SERVER
PORT FORWARDING
APPLICATION RULES
QOS ENGINE
NETWORK FILTER
ACCESS CONTROL
WEBSITE FILTER
INBOUND FILTER
FIREWALL SETTINGS
ROUTING
ADVANCED WIRELESS
WI-FI PROTECTED SETUP
ADVANCED NETWORK
GUEST ZONE
IPV6 FIREWALL
IPV6 ROUTING
ADVANCED NETWORK SETTINGS
These options are for users that wish to change the LAN settings. We do not recommend changing these settings from factory default. Changing these settings may affect the behavior of your network.
Save Settings
Don't Save Settings
UPNP
Universal Plug and Play(UPnP) supports peer-to-peer Plug and Play functionality for network devices.
Enable UPnP IGD :
WAN PING
If you enable this feature, the WAN port of your router will respond to ping requests from the Internet that are sent to the WAN IP Address.
Enable WAN Ping Response :
WAN PORT SPEED
WAN Port Speed :
Auto 10/100/1000Mbps
IPV4 MULTICAST STREAMS
Enable IPv4 Multicast Streams :
IPV6 MULTICAST STREAMS
Enable IPv6 Multicast Streams :
Save Settings
Don't Save Settings
Helpful Hints...
• UPnP helps other UPnP LAN hosts interoperate with the router. Leave the UPnP option enabled as long as the LAN has other UPnP applications.
• For added security, it is recommended that you disable the WAN Ping Response option. Ping is often used by malicious Internet users to locate active networks or PCs.
• The WAN speed is usually detected automatically. If you are having problems connecting to the WAN, try selecting the speed manually.
• If you are having trouble receiving video on demand type of service from the Internet, make sure the Multicast Stream option is enabled.
• More...
WIRELESS

Guest Zone

The Guest Zone feature will allow you to create temporary zones that can be used by guests to access the Internet. These zones will be separate from your main wireless network. You may configure different zones for the 2.4 GHz and 5 GHz wireless bands.



Enable Routing Between Zones: Check to allow network connectivity between the different zones created.

Enable Guest Zone: Check to enable the Guest Zone feature for the 2.4 GHz band.

Schedule: The schedule of time when the Guest Zone will be active. The schedule may be set to **Always**, which will allow the particular service to always be enabled. You can create your own times in the **Tools** > **Schedules** section or click **Add New**.

Wireless Network Name: Enter a wireless network name (SSID) that is different from your main wireless network.

Security Mode: If you want to choose a security mode for the 2.4 GHz band, choose from the drop-down menu.

Enable Guest Zone: Check to enable the Guest Zone feature for the 5 GHz band.

Schedule: The schedule of time when the Guest Zone will be active. The schedule may be set to **Always**, which will allow the particular service to always be enabled. You can create your own times in the **Tools** > **Schedules** section or click **Add New**.

Wireless Network Name: Enter a wireless network name (SSID) that is different from your main wireless network.

Security Mode: If you want to choose a security mode for the 5 GHz band, choose from the drop-down menu.

Click **Save Settings** to save the current configuration.

IPv6 Firewall

The DIR-868L's IPv6 Firewall feature allows you to configure which kind of IPv6 traffic is allowed to pass through the device. The DIR-868L's IPv6 Firewall functions in a similar way to the IP Filters feature.

Enable IPv6 Simple Security: Check the box to enable the IPv6 firewall simple security.

Configure IPv6 Firewall: Select an action from the drop-down menu.

Name: Enter a name to identify the IPv6 firewall rule.

Schedule: Use the drop-down menu to select the time schedule that the IPv6 Firewall Rule will be enabled on. The schedule may be set to **Always**, which will allow the particular service to always be enabled. You can create your own times in the **Tools** > **Schedules** section.

Source: Use the **Source** drop-down menu to specify the interface that connects to the source IPv6 addresses of the firewall rule.

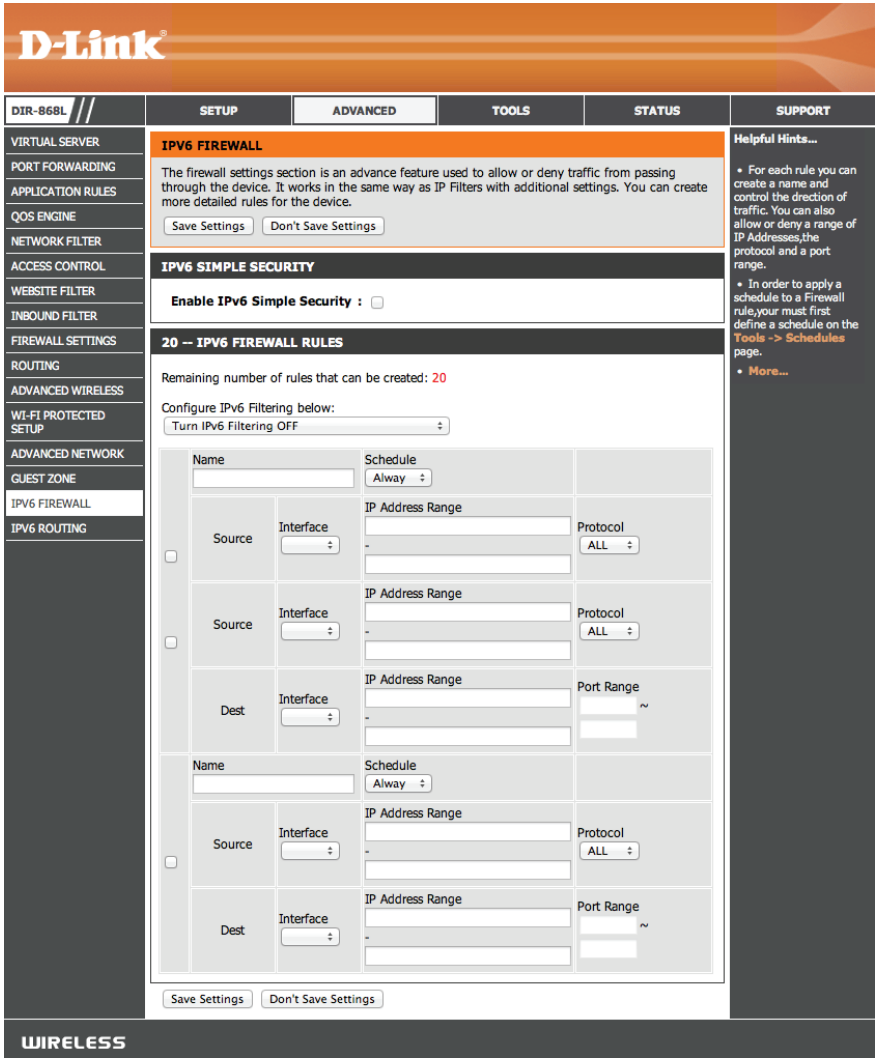
IP Address Range: Enter the source IPv6 address range in the adjacent **IP Address Range** field.

Destination: Use the **Destination** drop-down menu to specify the interface that connects to the destination IP addresses of the firewall rule.

Protocol: Select the protocol of the firewall port (**All**, **TCP**, **UDP**, or **ICMP**).

Port Range: Enter the first port of the range that will be used for the firewall rule in the first box and enter the last port in the field in the second box.

Click **Save Settings** to save the current configuration.



IPv6 Routing

This page allows you to specify custom routes that determine how data is moved around your network.

Route List: Check the box next to the route you wish to enable.

Name: Enter a specific name to identify this route.

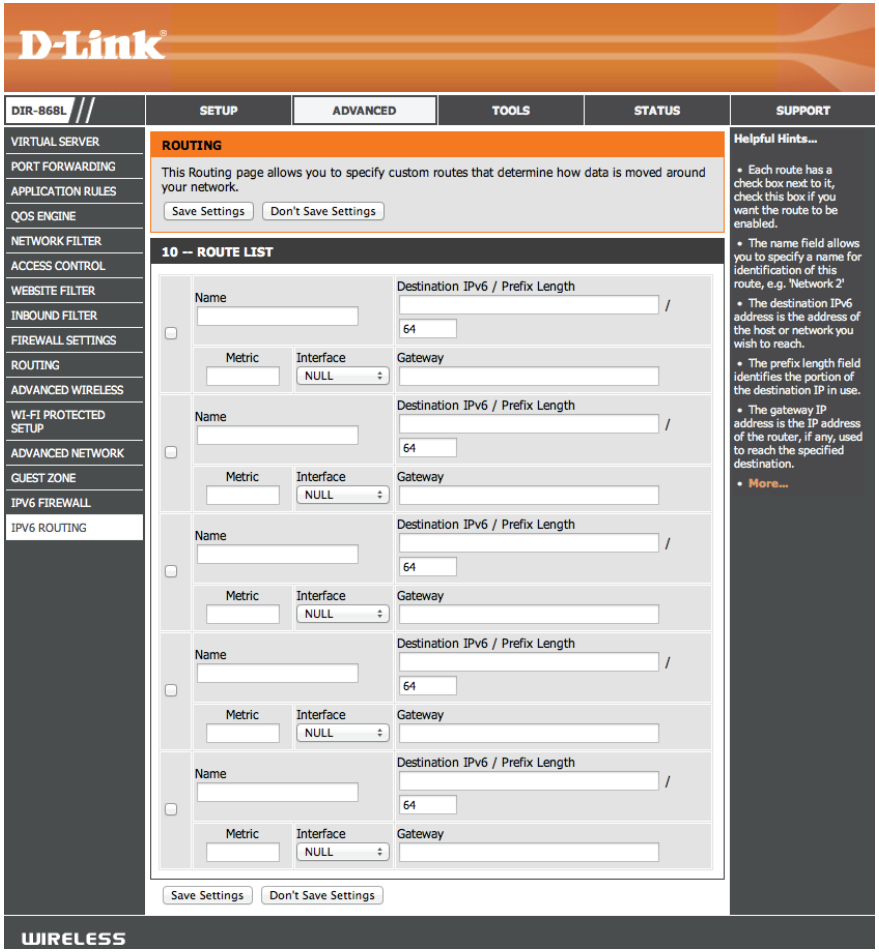
Destination IP/ Prefix Length: This is the IP address of the router used to reach the specified destination or enter the IPv6 address prefix length of the packets that will take this route.

Metric: Enter the metric value for this rule here.

Interface: Use the drop-down menu to specify if the IP packet must use the WAN or LAN interface to transit out of the router.

Gateway: Enter the next hop that will be taken if this route is used.

Click **Save Settings** to save the current configuration.


D-Link
DIR-868L
SETUP
ADVANCED
TOOLS
STATUS
SUPPORT
VIRTUAL SERVER
PORT FORWARDING
APPLICATION RULES
QOS ENGINE
NETWORK FILTER
ACCESS CONTROL
WEBSITE FILTER
INBOUND FILTER
FIREWALL SETTINGS
ROUTING
ADVANCED WIRELESS
WI-FI PROTECTED SETUP
ADVANCED NETWORK
GUEST ZONE
IPV6 FIREWALL
IPV6 ROUTING
ROUTING
This Routing page allows you to specify custom routes that determine how data is moved around your network.
Save Settings
Don't Save Settings
10 -- ROUTE LIST
Name
Destination IPv6 / Prefix Length
64
Metric
Interface
NULL
Gateway
Helpful Hints...
• Each route has a check box next to it, check this box if you want the route to be enabled.
• The name field allows you to specify a name for identification of this route, e.g. 'Network 2'
• The destination IPv6 address is the address of the host or network you wish to reach.
• The prefix length field identifies the portion of the destination IP in use.
• The gateway IP address is the IP address of the router, if any, used to reach the specified destination.
• More...
WIRELESS

Tools
Admin

This page will allow you to change the Administrator and User passwords. You can also enable Remote Management. There are two accounts that can access the management interface through the web browser. The accounts are admin and user. Admin has read/write access while user has read-only access. User can only view the settings but cannot make any changes. Only the admin account has the ability to change both admin and user account passwords.

Admin Password: Here you can enter a new password for the Administrator Login Name. The administrator can make changes to the settings.

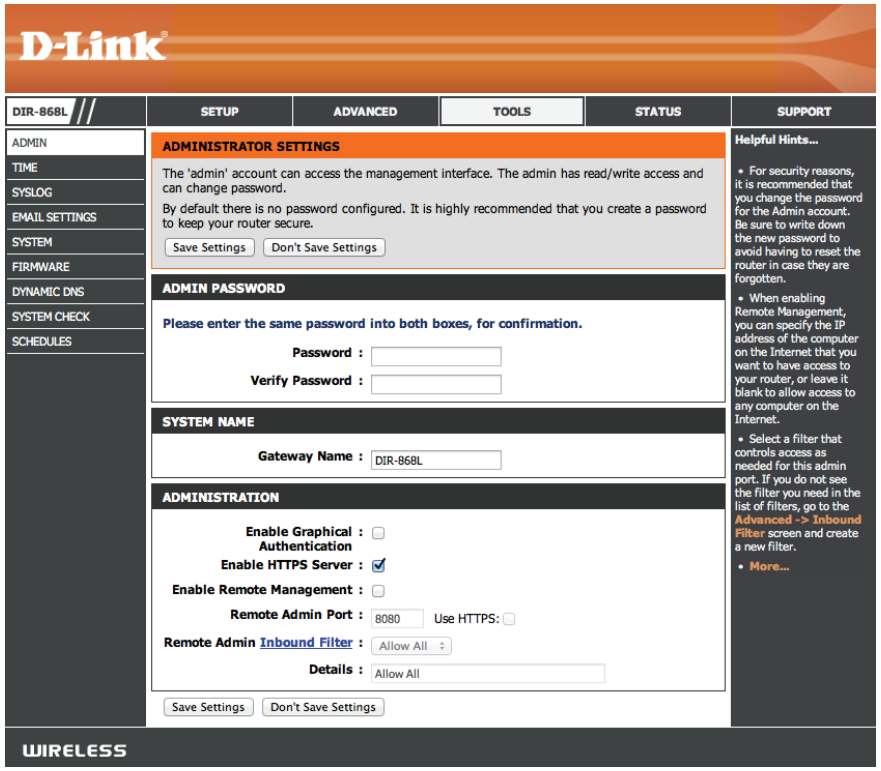
Password: Enter the new password for the User login. If you login as the User, you cannot change the settings (you can only view them). Then enter the password again for verification.

Gateway Name: Enter a name for your router.

Enable Graphical Authentication: Enables a challenge-response test to require users to type letters or numbers from a distorted image displayed on the screen to prevent online hackers and unauthorized users from gaining access to your router's network settings.

Enable HTTPS Server: Check to enable HTTPS to connect to the router securely. This means to connect to the router, you must enter **https://192.168.0.1** (for example) instead of **http://192.168.0.1**.

Enable Remote Management: Remote management allows the DIR-868L to be configured from the Internet by a web browser. A username/password is still required to access the Web Management interface.


D-Link
DIR-868L
SETUP
ADVANCED
TOOLS
STATUS
SUPPORT
ADMIN
TIME
SYSLOG
EMAIL SETTINGS
SYSTEM
FIRMWARE
DYNAMIC DNS
SYSTEM CHECK
SCHEDULES
ADMINISTRATOR SETTINGS
The 'admin' account can access the management interface. The admin has read/write access and can change password.
By default there is no password configured. It is highly recommended that you create a password to keep your router secure.
Save Settings
Don't Save Settings
ADMIN PASSWORD
Please enter the same password into both boxes, for confirmation.
Password :
Verify Password :
SYSTEM NAME
Gateway Name :
DIR-868L
ADMINISTRATION
Enable Graphical Authentication :
Enable HTTPS Server :
Enable Remote Management :
Remote Admin Port :
8080
Use HTTPS:
Remote Admin Inbound Filter :
Allow All
Details :
Allow All
Save Settings
Don't Save Settings
Helpful Hints...
• For security reasons, it is recommended that you change the password for the Admin account. Be sure to write down the new password to avoid having to reset the router in case they are forgotten.
• When enabling Remote Management, you can specify the IP address of the computer on the Internet that you want to have access to your router, or leave it blank to allow access to any computer on the Internet.
• Select a filter that controls access as needed for this admin port. If you do not see the filter you need in the list of filters, go to the Advanced -> Inbound Filter screen and create a new filter.
• More...
WIRELESS

Remote Admin Port: The port number used to access the DIR-868L is used in the URL. Example: **http://x.x.x.x:8080** whereas x.x.x.x is the Internet IP address of the DIR-868L and 8080 is the port used for the Web Management interface. If you have enabled **HTTPS Server,** you must enter **https://** as part of the URL to access the router remotely.

Remote Admin Inbound Filter: This section will list any rules that are created. You may click the **Edit** icon to change the settings or enable/disable the rule, or click the **Delete** icon to remove the rule. **Details** will display the current status of the rule.

Time

The Time Configuration option allows you to configure, update, and maintain the correct time on the internal system clock. From this section you can set the time zone that you are in and set the Time Server. Daylight Saving can also be configured to automatically adjust the time when needed.

Time: Displays the current date and time of the router.

Time Zone: Select your Time Zone from the drop-down menu.

Enable Daylight Saving: To select Daylight Saving time manually, select enabled or disabled, and enter a start date and an end date for daylight saving time.

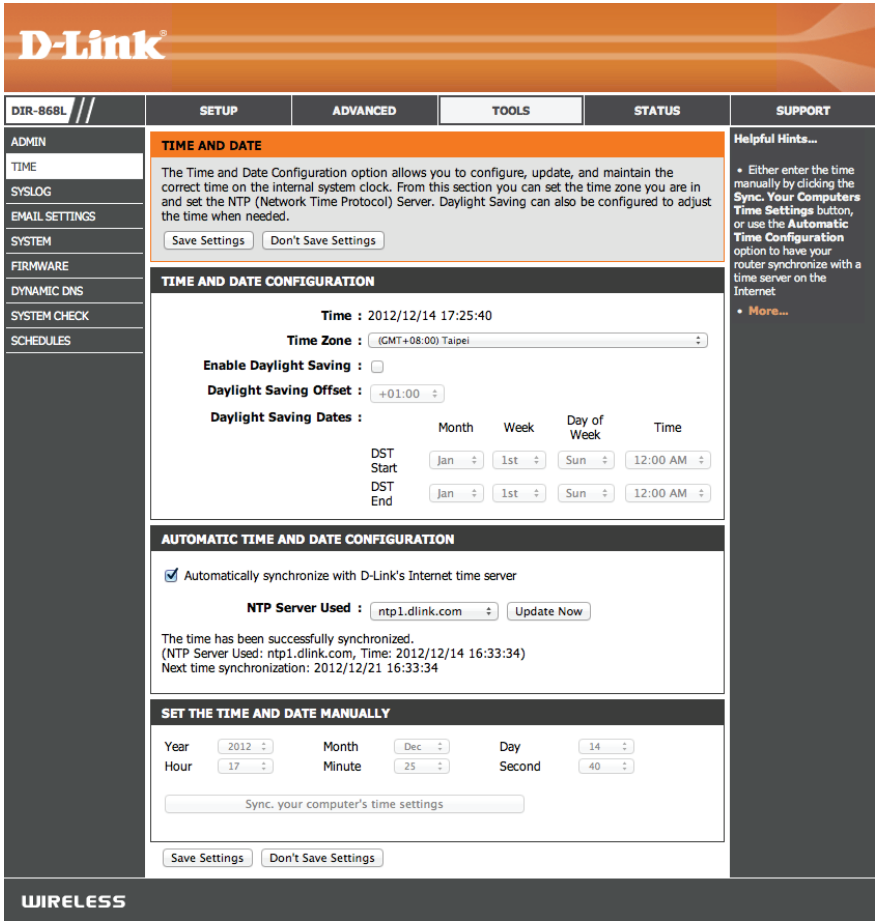
Enable NTP Server: NTP is short for Network Time Protocol. A NTP server will synch the time and date with your router. This will only connect to a server on the Internet, not a local server. Check the box to enable this feature.

NTP Server Used: Enter the IP address of a NTP server or select one from the drop-down menu.

Manually: To manually input the time, enter the values in these fields for the Year, Month, Day, Hour, Minute, and Second and then click **Set Time**.

You can also click **Sync Your Computer's Time Settings** to synch the date and time with the computer you are currently on.

Click **Save Settings** to save the current configuration.



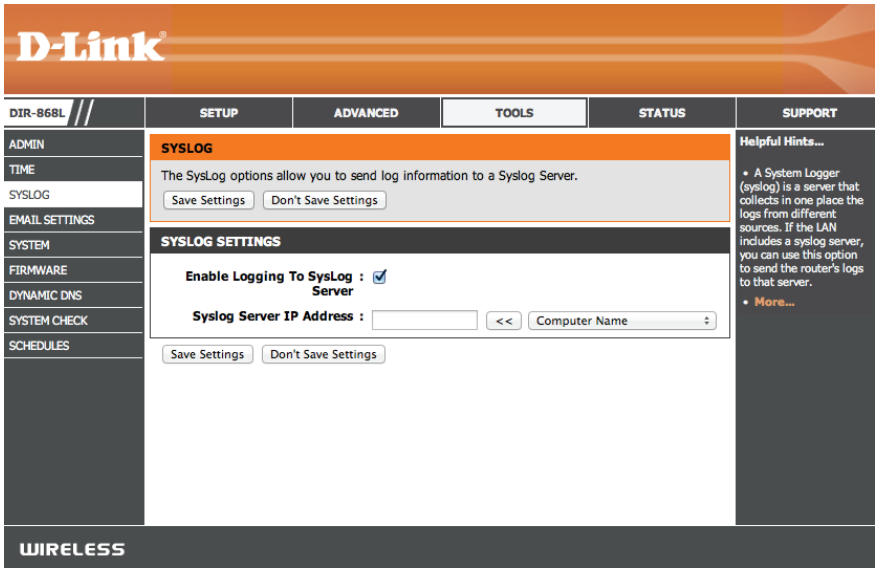
SysLog

The Broadband Router keeps a running log of events and activities occurring on the Router. You may send these logs to a SysLog server on your network.

Enable Logging to SysLog Server: Check this box to send the router logs to a SysLog Server.

Syslog Server IP Address: Enter the IP address for the Syslog server. If the Syslog server is connected to the router, select it from the drop-down menu to automatically populate the field.

Click **Save Settings** to save the current configuration.



Email Settings

The Email feature can be used to send the system log files, router alert messages, and firmware update notification to your email address.

Enable Email Notification: When this option is enabled, router activity logs are emailed to a designated email address.

From Email Address: This email address will appear as the sender when you receive a log file or firmware upgrade notification via email.

To Email Address: Enter the email address where you want the email sent.

SMTP Server Address: Enter the SMTP server address for sending email.

SMTP Server Port: Enter the SMTP port used on the server.

Enable Authentication: Check this box if your SMTP server requires authentication.

Account Name: Enter your account for sending email.

Password: Enter the password associated with the account. Re-type the password associated with the account.

On Log Full: When this option is selected, logs will be sent via email to your account when the log is full.

On Schedule: Selecting this option will send the logs via email according to schedule.

Schedule: This option is enabled when **On Schedule** is selected. You can select a schedule from the list of defined schedules. To create a schedule, go to **Tools > Schedules**.

Details: Here you can choose from a drop down menu whether email details are kept in the log or not.

Click **Save Settings** to save the current configuration

System

This section allows you to manage the router's configuration settings, reboot the router, and restore the router to the factory default settings. Restoring the unit to the factory default settings will erase all settings, including any rules that you've created.

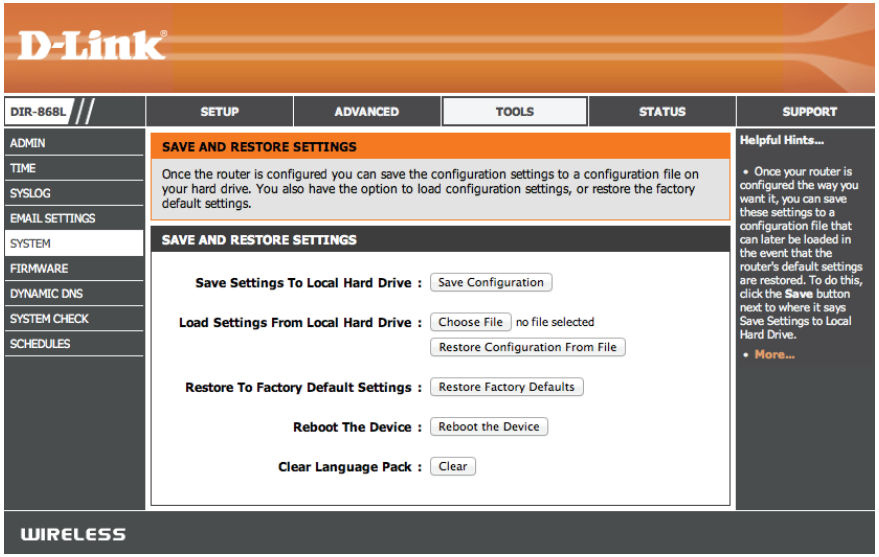
Save Settings to Local Hard Drive: Use this option to save the current router configuration settings to a file on the hard disk of the computer you are using. First, click the **Save Configuration** button. A file dialog will appear, allowing you to select a location and file name for the settings.

Load Settings from Local Hard Drive: Use this option to load previously saved router configuration settings. First, use the **Browse** option to find a previously saved file of configuration settings. Then, click the **Load** button to transfer those settings to the router.

Restore to Factory Default Settings: This option will restore all configuration settings back to the settings that were in effect at the time the router was shipped from the factory. Any settings that have not been saved will be lost, including any rules that you have created. If you want to save the current router configuration settings, use the **Save** button above.

Reboot Device: Click to reboot the router.

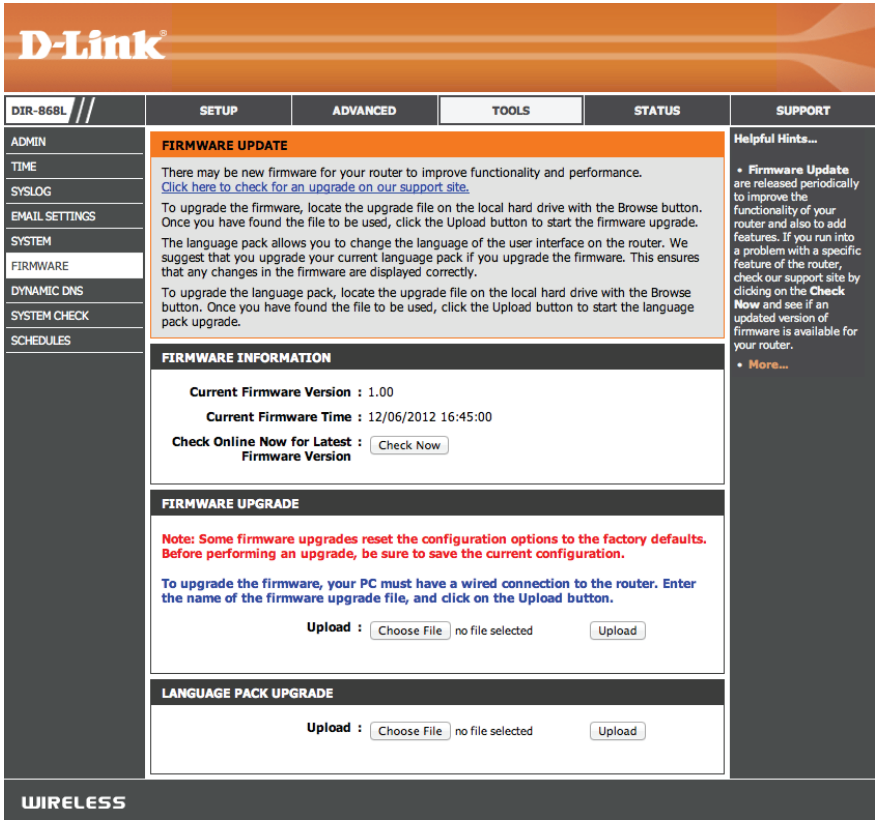
Clear Language Pack: Click to clear any currently installed language packs and reset to the default language.


D-Link
DIR-868L
SETUP
ADVANCED
TOOLS
STATUS
SUPPORT
ADMIN
TIME
SYSLOG
EMAIL SETTINGS
SYSTEM
FIRMWARE
DYNAMIC DNS
SYSTEM CHECK
SCHEDULES
SAVE AND RESTORE SETTINGS
Once the router is configured you can save the configuration settings to a configuration file on your hard drive. You also have the option to load configuration settings, or restore the factory default settings.
SAVE AND RESTORE SETTINGS
Save Settings To Local Hard Drive :
Save Configuration
Load Settings From Local Hard Drive :
Choose File
no file selected
Restore Configuration From File
Restore To Factory Default Settings :
Restore Factory Defaults
Reboot The Device :
Reboot the Device
Clear Language Pack :
Clear
Helpful Hints...
• Once your router is configured the way you want it, you can save these settings to a configuration file that can later be loaded in the event that the router's default settings are restored. To do this, click the Save button next to where it says Save Settings to Local Hard Drive.
• More...
WIRELESS

Firmware

You can upgrade the firmware of the access point here. Make sure the firmware you want to use is on the local hard drive of the computer. Click on **Choose File** to locate the firmware file to be used for the update. Please check the D-Link support website for firmware updates at **http://support.dlink.com**. You can download firmware upgrades to your hard drive from this site.

Check Now: Click **Check Now** to check for new firmware and language pack versions online.


D-Link
DIR-868L
SETUP
ADVANCED
TOOLS
STATUS
SUPPORT
ADMIN
TIME
SYSLOG
EMAIL SETTINGS
SYSTEM
FIRMWARE
DYNAMIC DNS
SYSTEM CHECK
SCHEDULES
FIRMWARE UPDATE
There may be new firmware for your router to improve functionality and performance.
Click here to check for an upgrade on our support site.
To upgrade the firmware, locate the upgrade file on the local hard drive with the Browse button. Once you have found the file to be used, click the Upload button to start the firmware upgrade.
The language pack allows you to change the language of the user interface on the router. We suggest that you upgrade your current language pack if you upgrade the firmware. This ensures that any changes in the firmware are displayed correctly.
To upgrade the language pack, locate the upgrade file on the local hard drive with the Browse button. Once you have found the file to be used, click the Upload button to start the language pack upgrade.
FIRMWARE INFORMATION
Current Firmware Version : 1.00
Current Firmware Time : 12/06/2012 16:45:00
Check Online Now for Latest Firmware Version : Check Now
FIRMWARE UPGRADE
Note: Some firmware upgrades reset the configuration options to the factory defaults. Before performing an upgrade, be sure to save the current configuration.
To upgrade the firmware, your PC must have a wired connection to the router. Enter the name of the firmware upgrade file, and click on the Upload button.
Upload : Choose File no file selected Upload
LANGUAGE PACK UPGRADE
Upload : Choose File no file selected Upload
Helpful Hints...
• Firmware Update are released periodically to improve the functionality of your router and also to add features. If you run into a problem with a specific feature of the router, check our support site by clicking on the Check Now and see if an updated version of firmware is available for your router.
• More...
WIRELESS

Firmware Upgrade

You can change update the internal router software by uploading a new firmware version.

Choose File: After you have downloaded the new firmware, click **Choose File** to locate the firmware update on your hard drive.

Upload: Click **Upload** to complete the firmware upgrade.

Language Pack

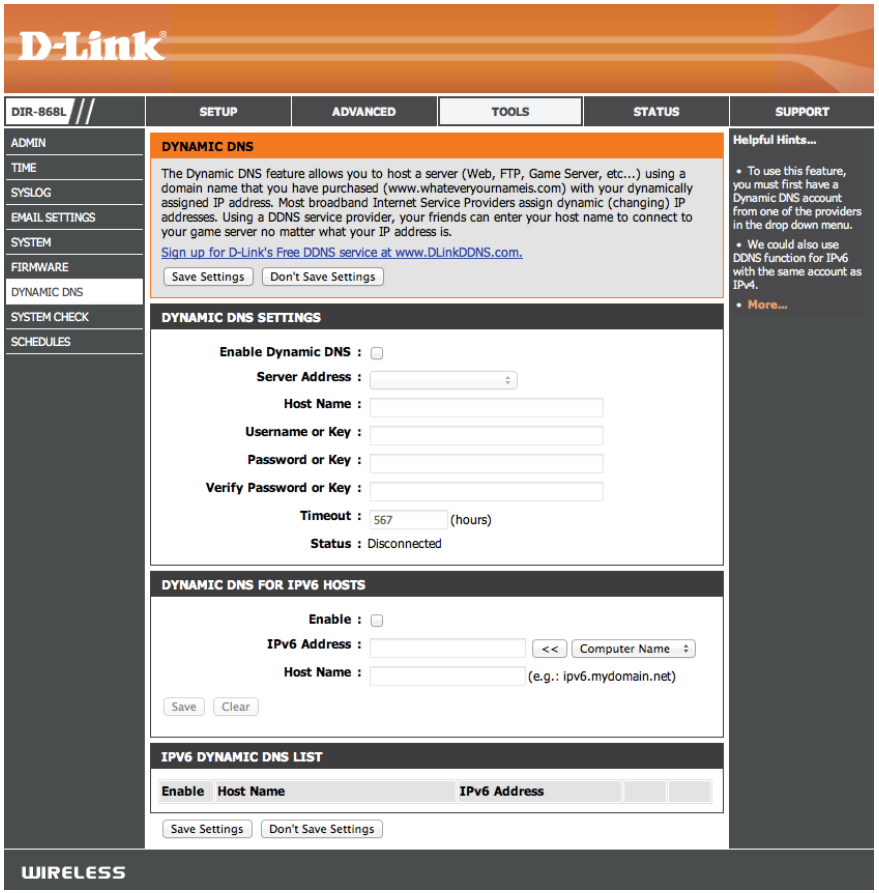
You can change the language of the web UI by uploading available language packs.

Choose File: After you have downloaded the new language pack, click **Choose File** to locate the language pack file on your hard drive.

Upload: Click **Upload** to complete the language pack upgrade.

Dynamic DNS

The DDNS feature allows you to host a server (Web, FTP, Game Server, etc…) using a domain name that you have purchased (www.yourname.com) with your dynamically assigned IP address. Most broadband Internet Service Providers assign dynamic (changing) IP addresses. Using a DDNS service provider, your friends can enter in your domain name to connect to your server no matter what your IP address is.


D-Link
DIR-868L
SETUP
ADVANCED
TOOLS
STATUS
SUPPORT
ADMIN
TIME
SYSLOG
EMAIL SETTINGS
SYSTEM
FIRMWARE
DYNAMIC DNS
SYSTEM CHECK
SCHEDULES
DYNAMIC DNS
The Dynamic DNS feature allows you to host a server (Web, FTP, Game Server, etc...) using a domain name that you have purchased (www.whateveryournameis.com) with your dynamically assigned IP address. Most broadband Internet Service Providers assign dynamic (changing) IP addresses. Using a DDNS service provider, your friends can enter your host name to connect to your game server no matter what your IP address is.
Sign up for D-Link's Free DDNS service at www.DLinkDDNS.com.
Save Settings
Don't Save Settings
DYNAMIC DNS SETTINGS
Enable Dynamic DNS :
Server Address :
Host Name :
Username or Key :
Password or Key :
Verify Password or Key :
Timeout : 567 (hours)
Status : Disconnected
DYNAMIC DNS FOR IPV6 HOSTS
Enable :
IPv6 Address :
<<
Computer Name
Host Name :
(e.g.: ipv6.mydomain.net)
Save
Clear
IPV6 DYNAMIC DNS LIST
Enable
Host Name
IPv6 Address
Save Settings
Don't Save Settings
Helpful Hints...
• To use this feature, you must first have a Dynamic DNS account from one of the providers in the drop down menu.
• We could also use DDNS function for IPv6 with the same account as IPv4.
• More...
WIRELESS

Enable Dynamic DNS: Dynamic Domain Name System is a method of keeping a domain name linked to a changing IP Address. Check the box to enable DDNS.

Server Address: Select your DDNS provider from the drop-down menu or enter the DDNS server address.

Host Name: Enter the Host Name that you registered with your DDNS service provider.

Username or Key: Enter the Username or key for your DDNS account.

Password or Key: Enter the Password or key for your DDNS account.

Timeout: Enter a timeout time (in hours).

Status: Displays the current connection status.

Enable DDNS for IPv6 Hosts Check the **Enable** box to enable DDNS for IPv6 Hosts.

IPv6 Address: Select your DDNS provider from the drop-down menu or enter the DDNS server address.

Host Name: Enter the Host Name that you registered with your DDNS service provider.

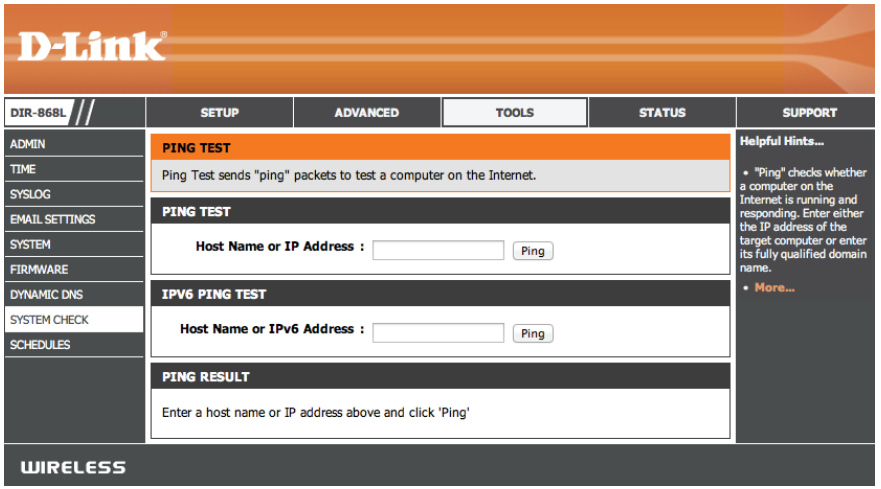
IPv6 DDNS List: Displays the list of active IPv6 Dynamic DNS addresses.

System Check

Ping Test: The Ping Test is used to send Ping packets to test if a computer is on the Internet. Enter the IP address that you wish to Ping and click **Ping**.

IPv6 Ping Test: Enter the IPv6 address that you wish to Ping and click **Ping**.

Ping Results: The results of your ping attempts will be displayed here.



Schedules

Schedules can be created for use with enforcing rules. For example, if you want to restrict web access to Mon-Fri from 3pm to 8pm, you could create a schedule selecting Mon, Tue, Wed, Thu, and Fri and enter a Start Time of 3pm and End Time of 8pm.

Name: Enter a name for your new schedule.

Days: Select a day, a range of days, or All Week to include every day.

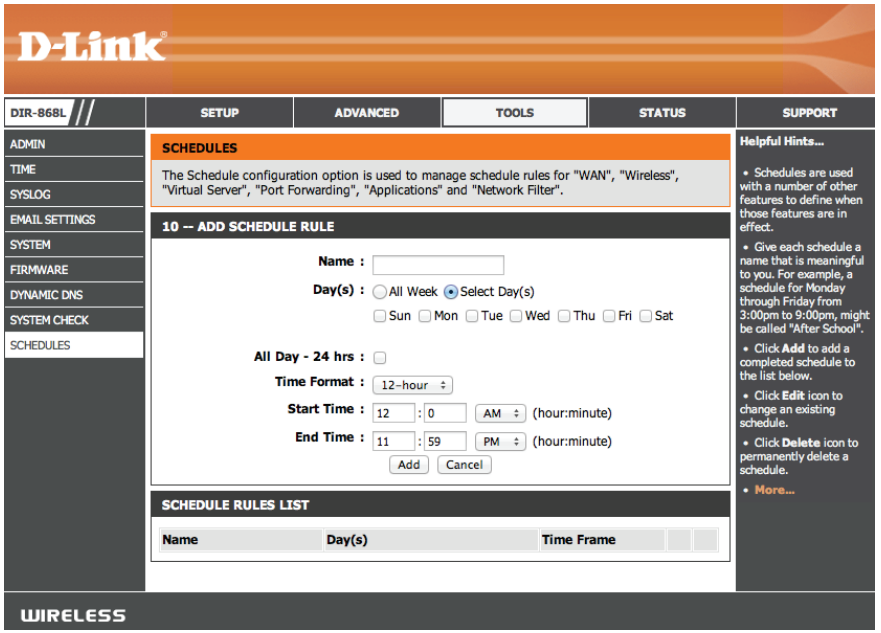
All Day - 24 Hrs: Check **All Day - 24hrs** to schedule the entire day.

Time Format: Choose a 24 hour or 12 hour clock-style.

Start Time: Enter a start time for your schedule.

End Time: Enter an end time for your schedule.

Schedule Rules List: The list of schedules will be listed here. Click the **Edit** icon to make changes or click the **Delete** icon to remove the schedule.


D-Link
DIR-868L
SETUP
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SYSLOG
EMAIL SETTINGS
SYSTEM
FIRMWARE
DYNAMIC DNS
SYSTEM CHECK
SCHEDULES
SCHEDULES
The Schedule configuration option is used to manage schedule rules for "WAN", "Wireless", "Virtual Server", "Port Forwarding", "Applications" and "Network Filter".
10 -- ADD SCHEDULE RULE
Name :
Day(s) : All Week Select Day(s)
Sun Mon Tue Wed Thu Fri Sat
All Day - 24 hrs :
Time Format : 12-hour
Start Time : 12 : 0 AM (hour:minute)
End Time : 11 : 59 PM (hour:minute)
Add Cancel
SCHEDULE RULES LIST
Name
Day(s)
Time Frame
Helpful Hints...
• Schedules are used with a number of other features to define when those features are in effect.
• Give each schedule a name that is meaningful to you. For example, a schedule for Monday through Friday from 3:00pm to 9:00pm, might be called "After School".
• Click Add to add a completed schedule to the list below.
• Click Edit icon to change an existing schedule.
• Click Delete icon to permanently delete a schedule.
• More...
WIRELESS

Status
Device Info

This page displays the current information for the DIR-868L. It will display the LAN, WAN (Internet), and Wireless information. If your Internet connection is set up for a Dynamic IP address then a **Release** button and a **Renew** button will be displayed. Use **Release** to disconnect from your ISP and use **Renew** to connect to your ISP. If your Internet connection is set up for PPPoE, a **Connect** button and a **Disconnect** button will be displayed. Use **Disconnect** to drop the PPPoE connection and use **Connect** to establish the PPPoE connection.

General: Displays the router's time and firmware version.

WAN: Displays the MAC address and the public IP settings

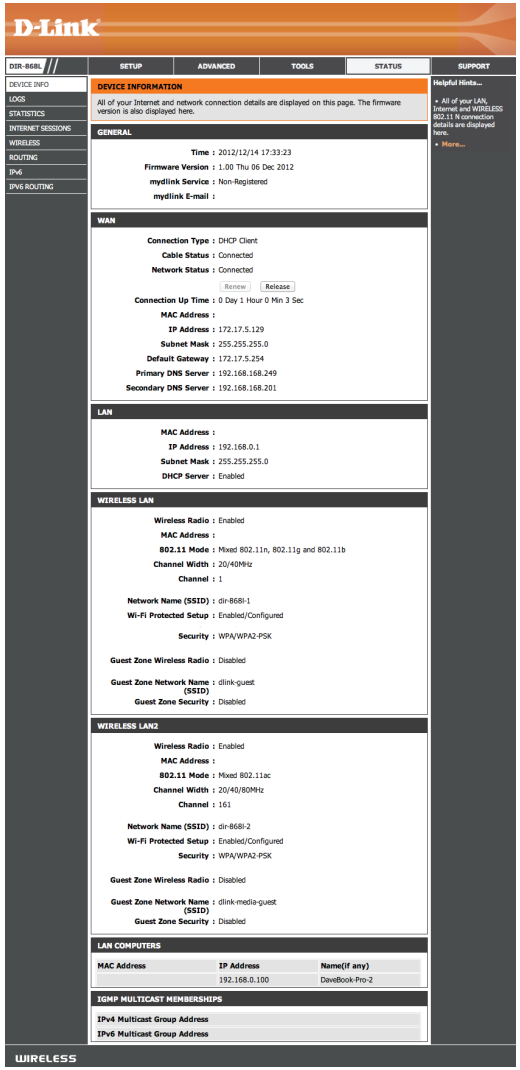
LAN: Displays the MAC address and the private (local) IP settings for the router.

Wireless LAN1: Displays the 2.4 GHz wireless MAC address and your wireless settings such as SSID and Channel.

Wireless LAN2: Displays the 5 GHz wireless MAC address and your wireless settings such as SSID and Channel.

LAN Computers: Displays computers and devices that are connected to the router via Ethernet and that are receiving an IP address assigned by the router (DHCP).

IGMP Multicast Memberships: Displays the group address of any IGMP multicasts.



Logs

The router automatically logs (records) events of possible interest in it's internal memory. If there isn't enough internal memory for all events, logs of older events are deleted but logs of the latest events are retained. The Logs option allows you to view the router logs. You can define what types of events you want to view and the level of the events to view. This router also has external Syslog Server support so you can send the log files to a computer on your network that is running a Syslog utility.

Log Options: You can select the types of messages that you want to display from the log. System Activity, Debug Information, Attacks, Dropped Packets, and Notice messages can be selected. Click **Apply Log Settings Now** to activate your settings.

Refresh: Updates the log details on the screen so it displays any recent activity.

First Page: Click to go to the first page.

Last Page: Click to go to the last page.

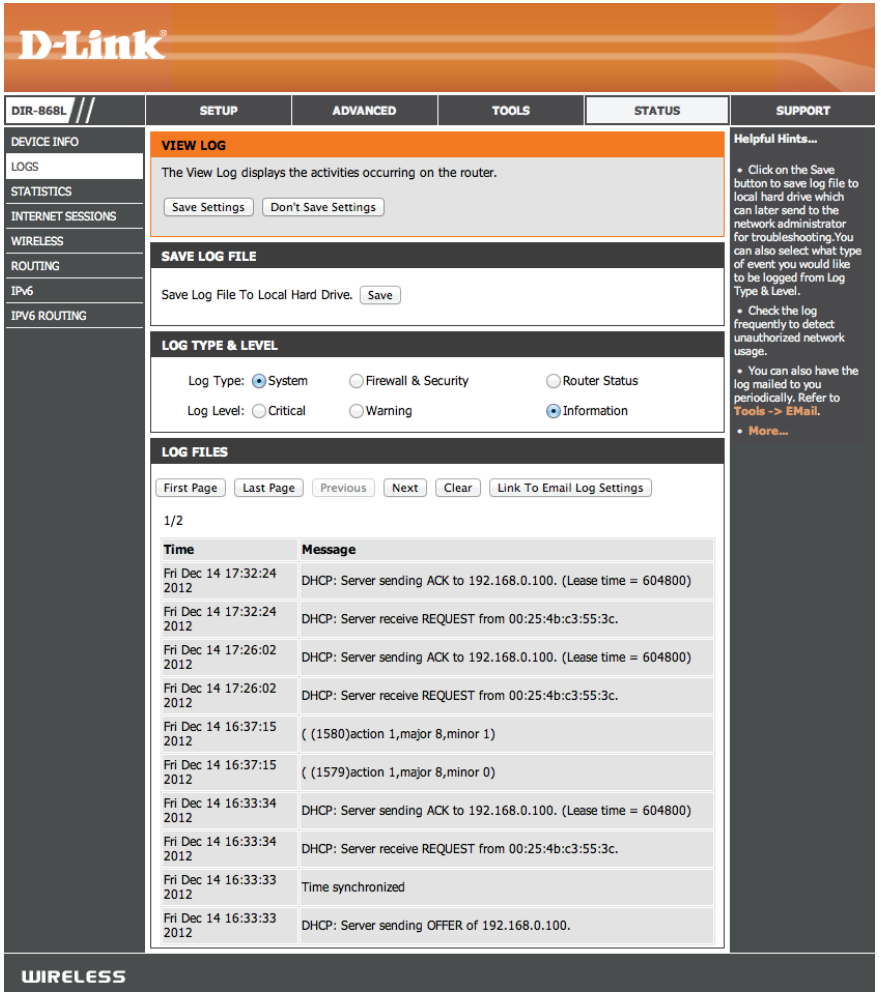
Previous: Click to go back one page.

Next: Click to go to the next page.

Clear: Clears all of the log contents.

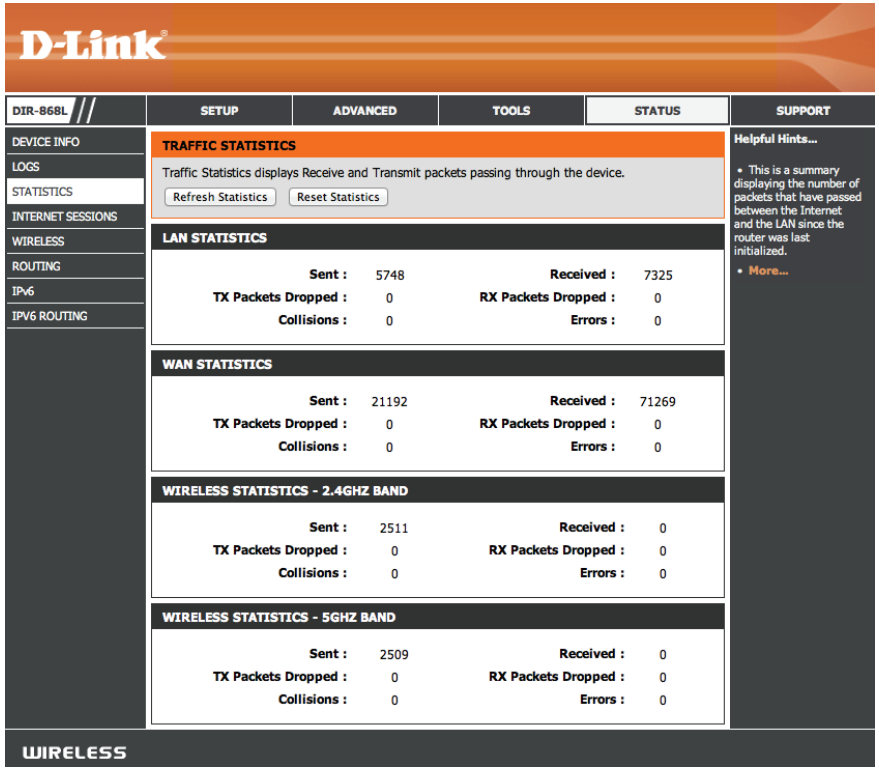
Email Now: This option will send a copy of the router log to your email address configured in the **Tools** > **Email Settings** screen.

Save Log: This option will save the router log to a file on your computer.


D-Link
DIR-868L
SETUP
ADVANCED
TOOLS
STATUS
SUPPORT
DEVICE INFO
LOGS
STATISTICS
INTERNET SESSIONS
WIRELESS
ROUTING
IPv6
IPV6 ROUTING
VIEW LOG
The View Log displays the activities occurring on the router.
Save Settings
Don't Save Settings
SAVE LOG FILE
Save Log File To Local Hard Drive.
Save
LOG TYPE & LEVEL
Log Type: System Firewall & Security Router Status
Log Level: Critical Warning Information
LOG FILES
First Page
Last Page
Previous
Next
Clear
Link To Email Log Settings
1/2
Time
Message
Fri Dec 14 17:32:24 2012
DHCP: Server sending ACK to 192.168.0.100. (Lease time = 604800)
Fri Dec 14 17:32:24 2012
DHCP: Server receive REQUEST from 00:25:4b:c3:55:3c.
Fri Dec 14 17:26:02 2012
DHCP: Server sending ACK to 192.168.0.100. (Lease time = 604800)
Fri Dec 14 17:26:02 2012
DHCP: Server receive REQUEST from 00:25:4b:c3:55:3c.
Fri Dec 14 16:37:15 2012
((1580)action 1,major 8,minor 1)
Fri Dec 14 16:37:15 2012
((1579)action 1,major 8,minor 0)
Fri Dec 14 16:33:34 2012
DHCP: Server sending ACK to 192.168.0.100. (Lease time = 604800)
Fri Dec 14 16:33:34 2012
DHCP: Server receive REQUEST from 00:25:4b:c3:55:3c.
Fri Dec 14 16:33:33 2012
Time synchronized
Fri Dec 14 16:33:33 2012
DHCP: Server sending OFFER of 192.168.0.100.
Helpful Hints...
• Click on the Save button to save log file to local hard drive which can later send to the network administrator for troubleshooting.You can also select what type of event you would like to be logged from Log Type & Level.
• Check the log frequently to detect unauthorized network usage.
• You can also have the log mailed to you periodically. Refer to Tools -> EMail.
• More...
WIRELESS

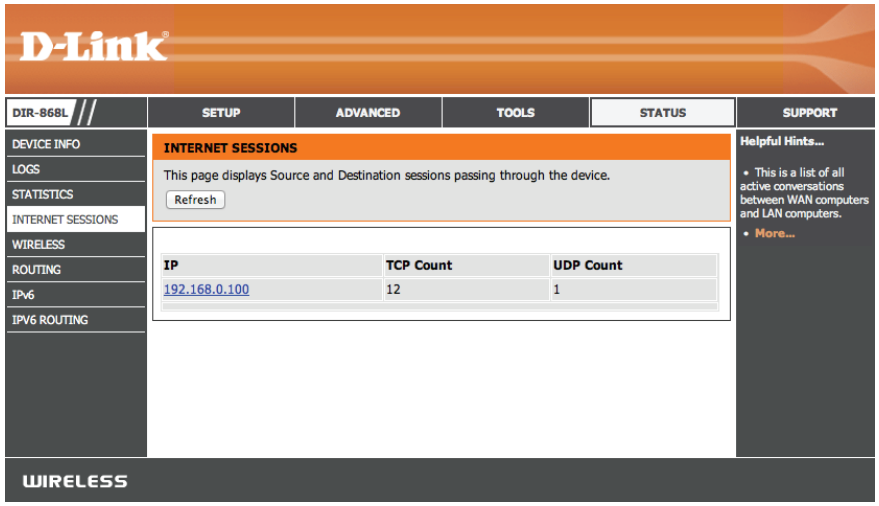
Statistics

The screen below displays the **Traffic Statistics**. Here you can view the amount of packets that pass through the DIR-868L on both the WAN, LAN ports and the wireless segments. The traffic counter will reset if the device is rebooted.



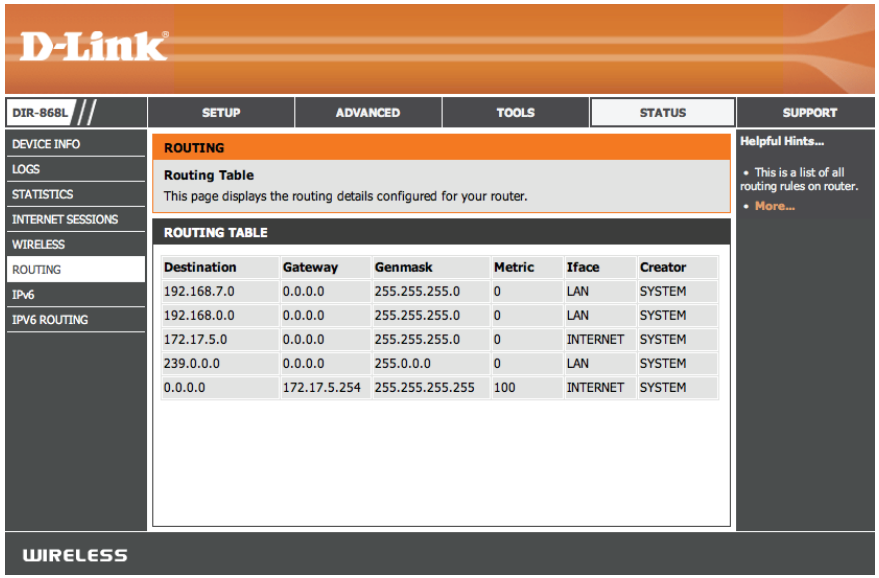
Internet Sessions

The Internet Sessions page displays full details of active Internet sessions through your router. An Internet session is a conversation between a program or application on a LAN-side computer and a program or application on a WAN-side computer.



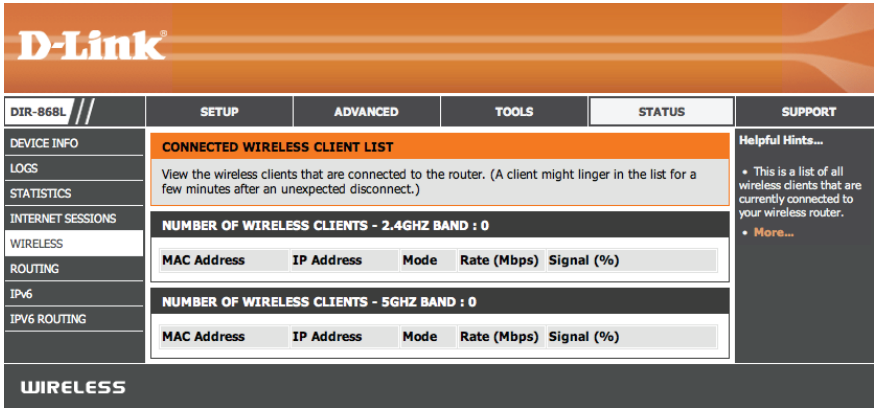
Routing

This page will display your current routing table.



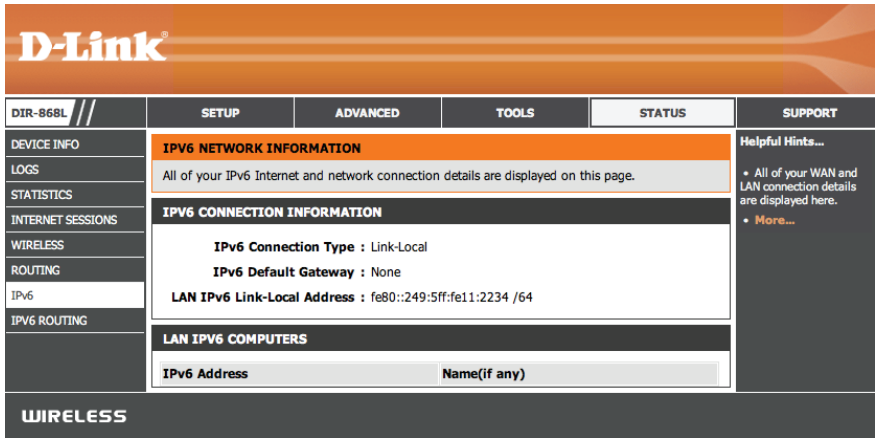
Wireless

The wireless client table displays a list of current connected wireless clients. This table also displays the connection time and MAC address of the connected wireless clients.



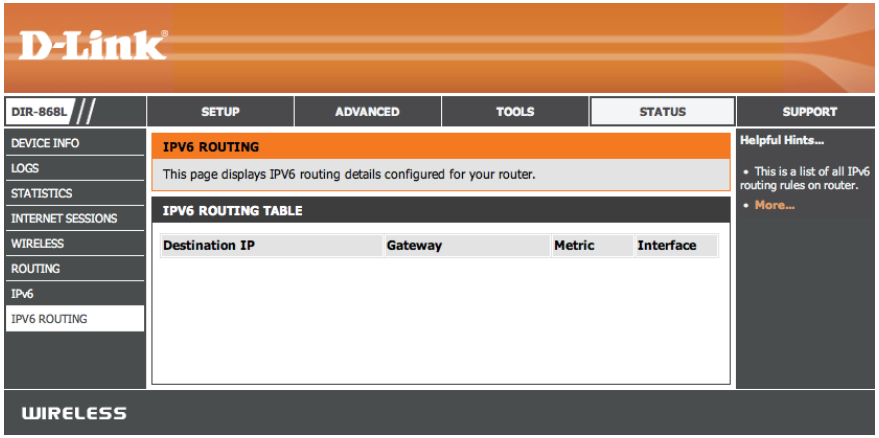
IPv6

The IPv6 page displays a summary of the Router's IPv6 settings and lists the IPv6 address and host name of any IPv6 clients.



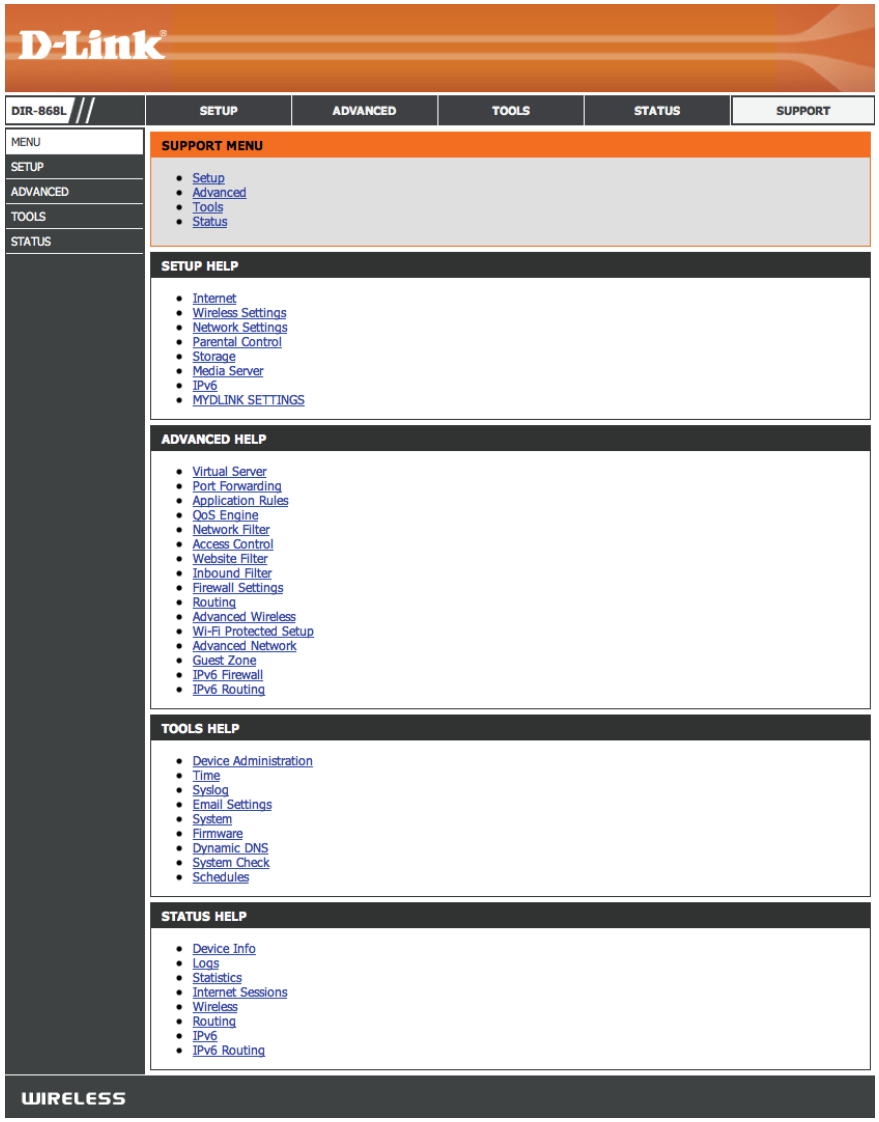
IPv6 Routing

This page displays the IPV6 routing details configured for your router.



Support

The Support pages let you jump to descriptions of the settings and their functions.



Connect a Wireless Client to your Router

WPS Button

The easiest and most secure way to connect your wireless devices to the router is WPS (Wi-Fi Protected Setup). Most wireless devices such as wireless adapters, media players, Blu-ray DVD players, wireless printers and cameras will have a WPS button (or a software utility with WPS) that you can press to connect to the DIR-868L router. Please refer to your user manual for the wireless device you want to connect to make sure you understand how to enable WPS. Once you know, follow the steps below:

Step 1 - Press the WPS button on the DIR-868L for about 1 second. The Internet LED on the front will start to blink.

Step 2 - Within 2 minutes, press the WPS button on your wireless client (or launch the software utility and start the WPS process).

Step 3 - Allow up to 1 minute while your connection is configured. Once the Internet light stops blinking, you will be connected and your wireless connection will be secure with WPA2.

Windows® 7
WPA/WPA2

It is recommended to enable wireless security (WPA/WPA2) on your wireless router or access point before configuring your wireless adapter. If you are joining an existing network, you will need to know the security key or passphrase being used.

1. Click on the wireless icon in your system tray (lower-right corner).

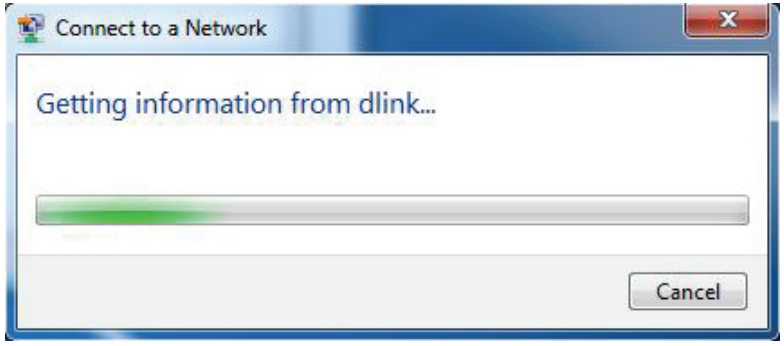
Wireless Icon

2. The utility will display any available wireless networks in your area.

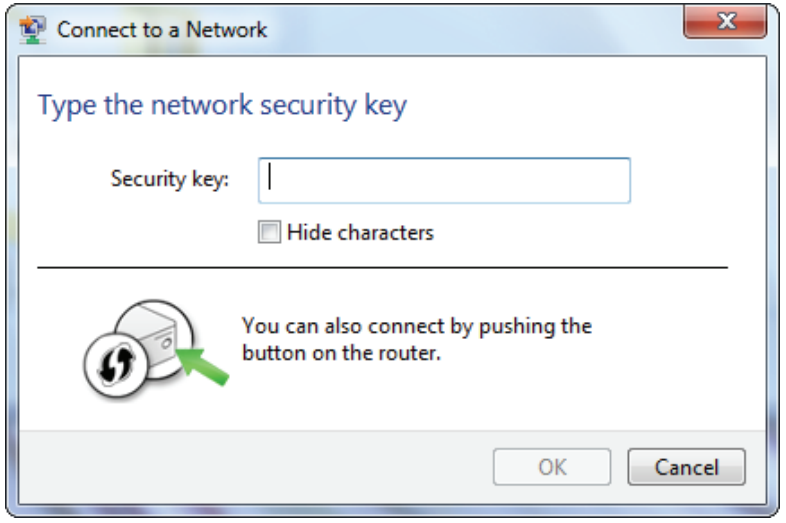
3. Highlight the wireless connection with Wi-Fi name (SSID) you would like to connect to and click the **Connect** button.

   If you get a good signal but cannot access the Internet, check your TCP/IP settings for your wireless adapter. Refer to the Networking Basics section in this manual for more information.

4. The following window appears while your computer tries to connect to the router.



5. Enter the same security key or passphrase (Wi-Fi password) that is on your router and click **Connect**. You can also connect by pushing the WPS button on the router.

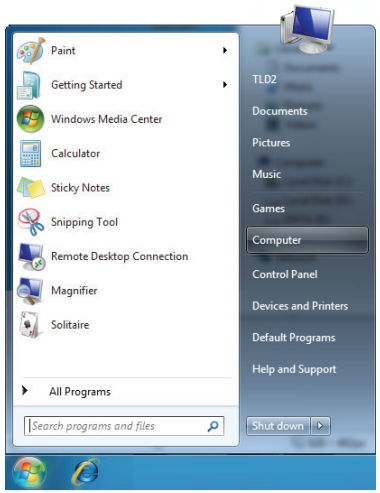


It may take 20-30 seconds to connect to the wireless network. If the connection fails, please verify that the security settings are correct. The key or passphrase must be exactly the same as on the wireless router.

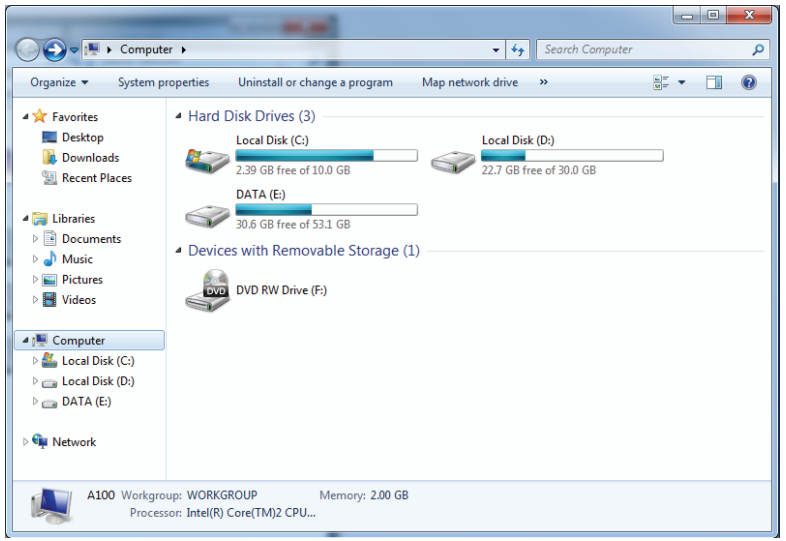
WPS

The WPS feature of the DIR-868L can be configured using Windows® 7. Carry out the following steps to use Windows® 7 to configure the WPS feature:

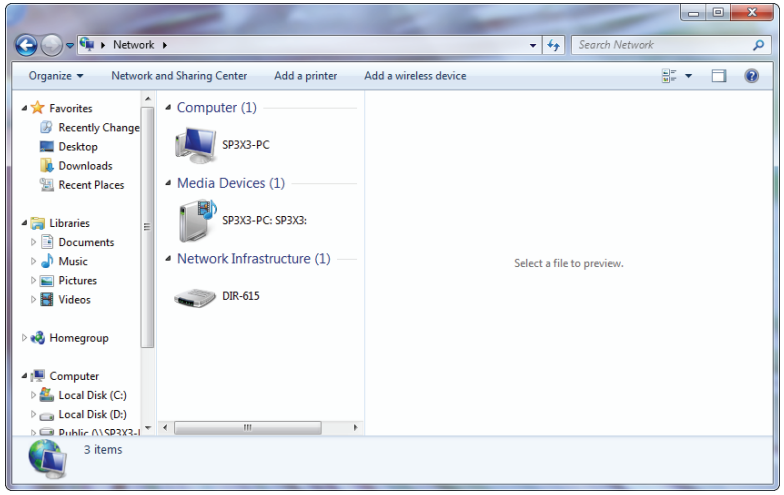
1. Click the **Start** button and select **Computer** from the Start menu.



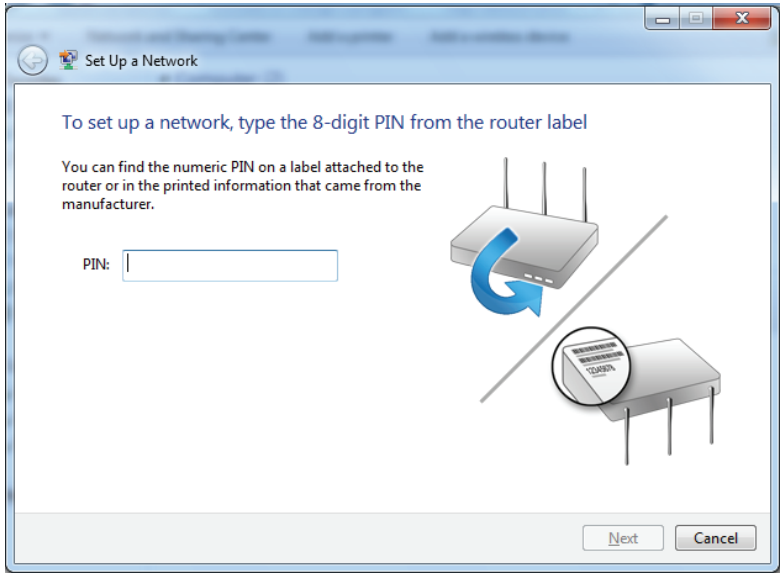
2. Click **Network** on the left side.



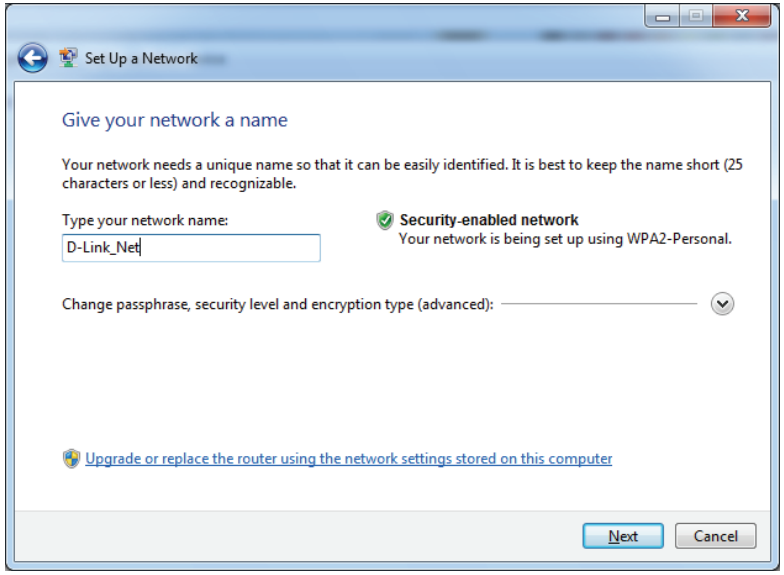
3. Double-click the DIR-868L.



4. Input the WPS PIN number (on the router label) in the **Setup** > **Wireless Setup** menu in the Router's Web UI) and click **Next**.

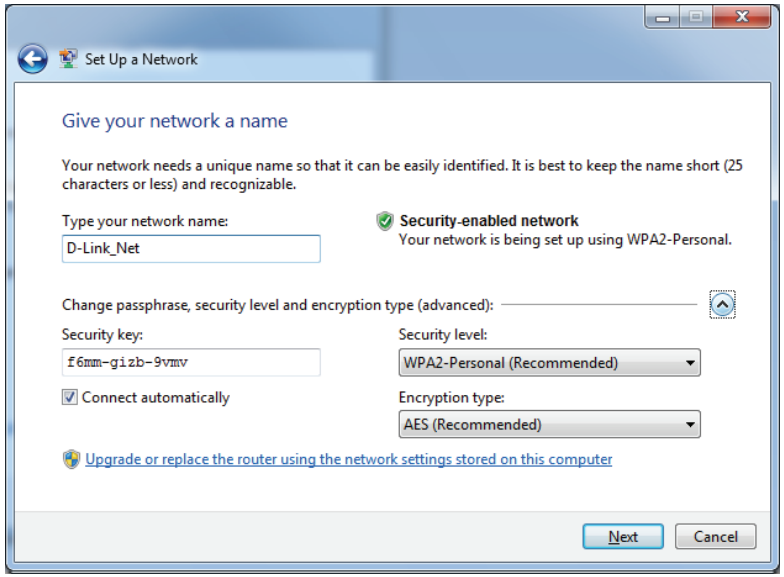

Set Up a Network
To set up a network, type the 8-digit PIN from the router label
You can find the numeric PIN on a label attached to the router or in the printed information that came from the manufacturer.
PIN:
Next
Cancel

5. Type a name to identify the network.


Set Up a Network
Give your network a name
Your network needs a unique name so that it can be easily identified. It is best to keep the name short (25 characters or less) and recognizable.
Type your network name:
D-Link_Net
Security-enabled network
Your network is being set up using WPA2-Personal.
Change passphrase, security level and encryption type (advanced):
Upgrade or replace the router using the network settings stored on this computer
Next
Cancel

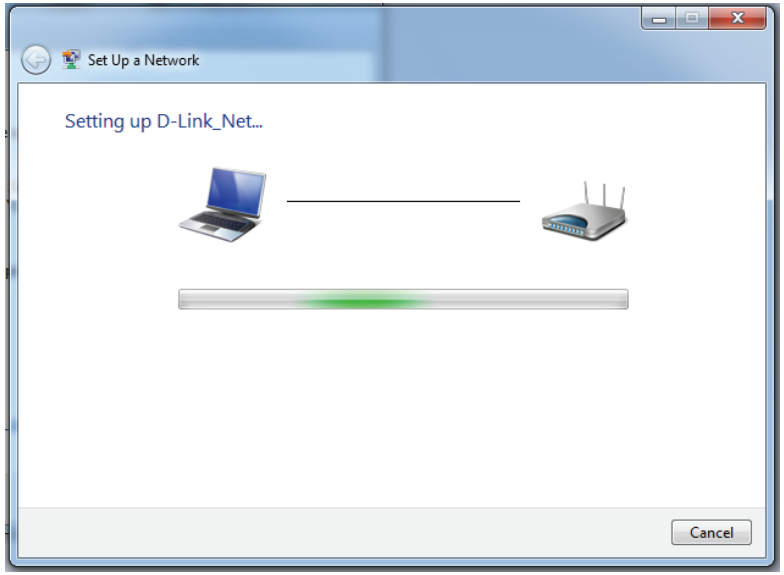
6. To configure advanced settings, click the icon.

Click **Next** to continue.


Set Up a Network
Give your network a name
Your network needs a unique name so that it can be easily identified. It is best to keep the name short (25 characters or less) and recognizable.
Type your network name:
D-Link_Net
Security-enabled network
Your network is being set up using WPA2-Personal.
Change passphrase, security level and encryption type (advanced):
Security key:
f6mm-gizb-9vmv
Security level:
WPA2-Personal (Recommended)
Connect automatically
Encryption type:
AES (Recommended)
Upgrade or replace the router using the network settings stored on this computer
Next
Cancel

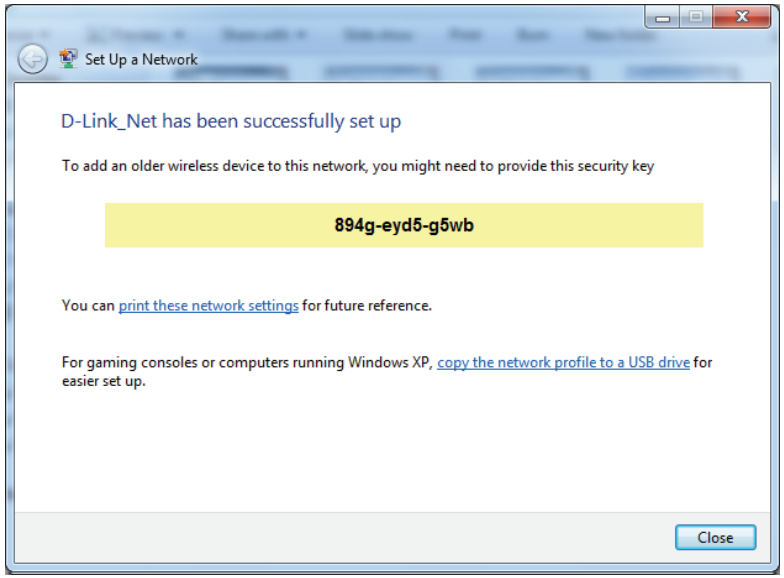
7. The following window appears while the Router is being configured.

   Wait for the configuration to complete.



8. The following window informs you that WPS on the router has been setup successfully.

   Make a note of the security key as you may need to provide this security key if adding an older wireless device to the network in the future.


Set Up a Network
D-Link_Net has been successfully set up
To add an older wireless device to this network, you might need to provide this security key
894g-eyd5-g5wb
You can print these network settings for future reference.
For gaming consoles or computers running Windows XP, copy the network profile to a USB drive for easier set up.
Close

9. Click **Close** to complete WPS setup.

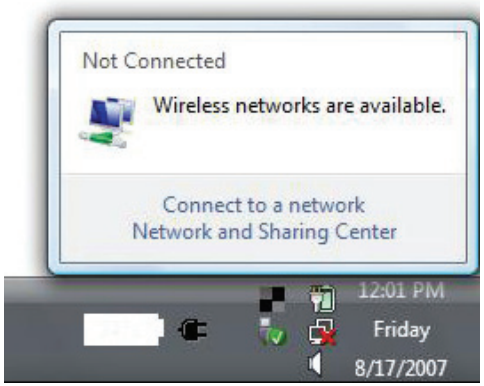
Windows Vista®

Windows Vista® users may use the built-in wireless utility. If you are using another company's utility, please refer to the user manual of your wireless adapter for help with connecting to a wireless network. Most utilities will have a "site survey" option similar to the Windows Vista® utility as seen below.

If you receive the **Wireless Networks Detected** bubble, click on the center of the bubble to access the utility.

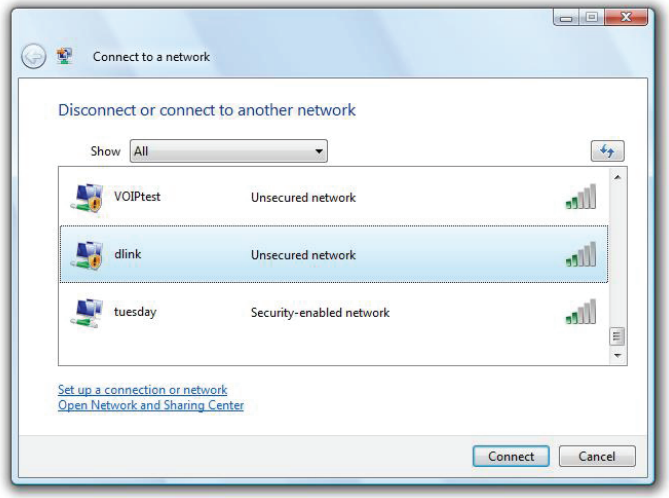
or

Right-click on the wireless computer icon in your system tray (lower-right corner next to the time). Select **Connect to a network**.



The utility will display any available wireless networks in your area. Click on a network (displayed using the SSID) and click the **Connect** button.

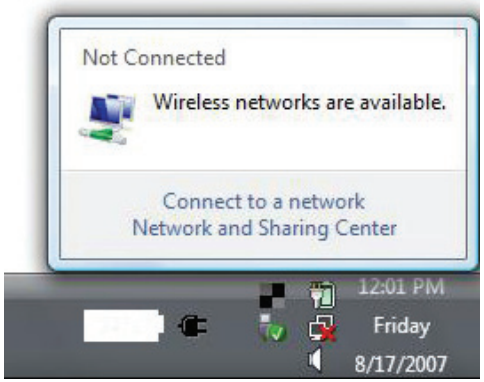
If you get a good signal but cannot access the Internet, check you TCP/IP settings for your wireless adapter. Refer to the **Networking Basics** section in this manual for more information.



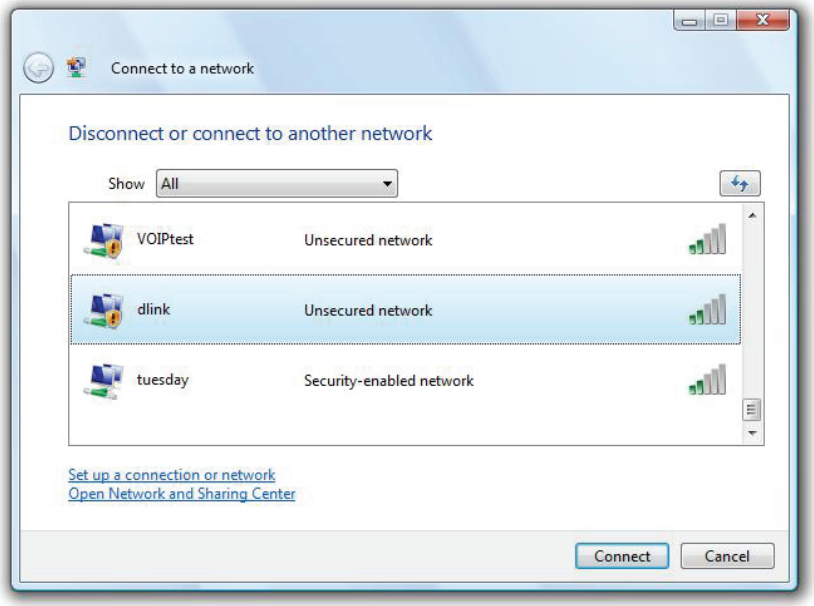
WPA/WPA2

It is recommended to enable wireless security (WPA/WPA2) on your wireless router or access point before configuring your wireless adapter. If you are joining an existing network, you will need to know the security key or passphrase being used.

1. Open the Windows Vista® Wireless Utility by right-clicking on the wireless computer icon in your system tray (lower right corner of screen). Select **Connect to a network**.



2. Highlight the Wi-Fi name (SSID) you would like to connect to and click **Connect**.



3. Enter the same security key or passphrase (Wi-Fi password) that is on your router and click **Connect**.

It may take 20-30 seconds to connect to the wireless network. If the connection fails, please verify that the security settings are correct. The key or passphrase must be exactly the same as on the wireless router.

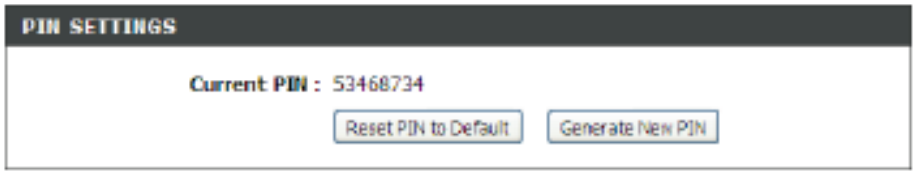
Connect to a network
Type the network security key or passphrase for Candy
The person who setup the network can give you the key or passphrase.
Security key or passphrase:
Display characters
If you have a USB flash drive with network settings for Candy, insert it now.
Connect
Cancel

WPS/WCN 2.0

The router supports Wi-Fi protection, referred to as WCN 2.0 in Windows Vista®. The following instructions for setting this up depends on whether you are using Windows Vista® to configure the router or third party software.

When you first set up the router, Wi-Fi protection is disabled and unconfigured. To enjoy the benefits of Wi-Fi protection, the router must be both enabled and configured. There are three basic methods to accomplish this: use Windows Vista's built-in support for WCN 2.0, use software provided by a third party, or manually configure.

If you are running Windows Vista®, log into the router and click the **Enable** checkbox in the **Basic** > **Wireless** section. Use the Current PIN that is displayed on the **Advanced** > **Wi-Fi Protected Setup** section or choose to click the **Generate New PIN** button or **Reset PIN to Default** button.

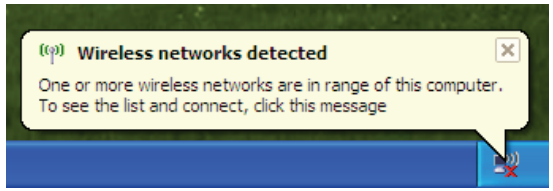


If you are using third party software to set up Wi-Fi Protection, carefully follow the directions. When you are finished, proceed to the next section to set up the newly-configured router.

Windows® XP

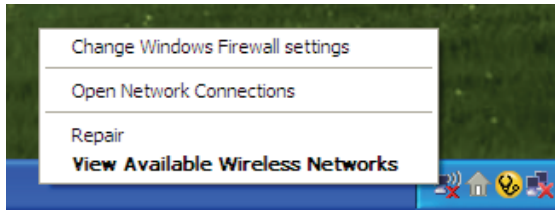
Windows® XP users may use the built-in wireless utility (Zero Configuration Utility). The following instructions are for Service Pack 2 users. If you are using another company's utility, please refer to the user manual of your wireless adapter for help with connecting to a wireless network. Most utilities will have a "site survey" option similar to the Windows® XP utility as seen below.

If you receive the **Wireless Networks Detected** bubble, click on the center of the bubble to access the utility.


Wireless networks detected
One or more wireless networks are in range of this computer.
To see the list and connect, click this message

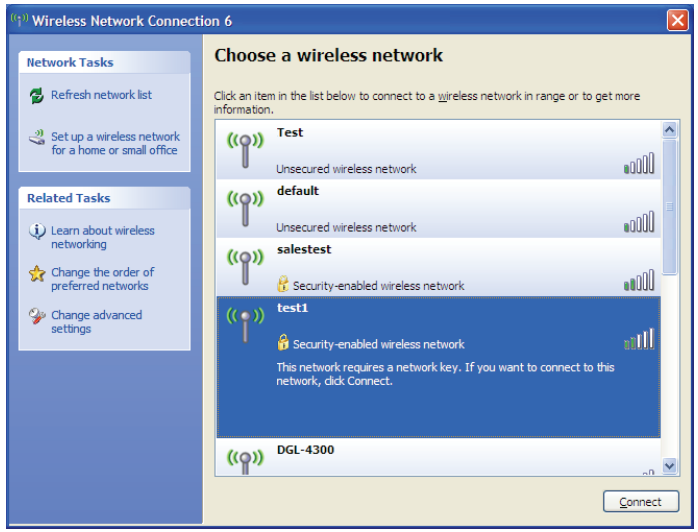
or

Right-click on the wireless computer icon in your system tray (lower-right corner next to the time). Select **View Available Wireless Networks**.



The utility will display any available wireless networks in your area. Click on a Wi-Fi network (displayed using the SSID) and click the **Connect** button.

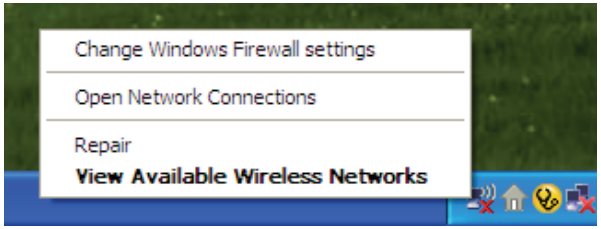
If you get a good signal but cannot access the Internet, check you TCP/IP settings for your wireless adapter. Refer to the **Networking Basics** section in this manual for more information.


Wireless Network Connection 6
Network Tasks
Refresh network list
Set up a wireless network for a home or small office
Related Tasks
Learn about wireless networking
Change the order of preferred networks
Change advanced settings
Choose a wireless network
Click an item in the list below to connect to a wireless network in range or to get more information.
Test
Unsecured wireless network
default
Unsecured wireless network
salestest
Security-enabled wireless network
test1
Security-enabled wireless network
This network requires a network key. If you want to connect to this network, click Connect.
DGL-4300
Connect

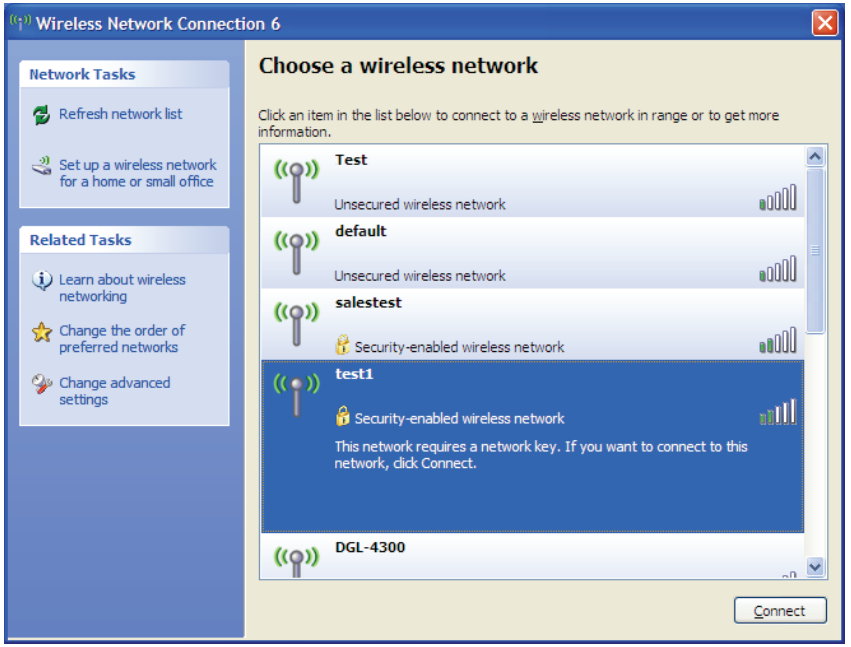
WPA/WPA2

It is recommended to enable WPA on your wireless router or access point before configuring your wireless adapter. If you are joining an existing network, you will need to know the WPA key being used.

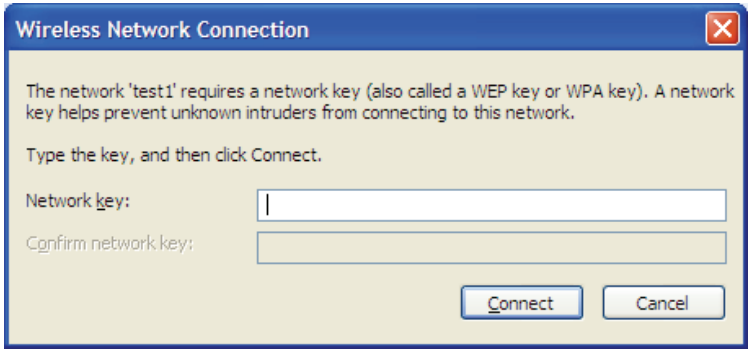
1. Open the Windows® XP Wireless Utility by right-clicking on the wireless computer icon in your system tray (lower-right corner of screen). Select **View Available Wireless Networks**.



2. Highlight the Wi-Fi network (SSID) you would like to connect to and click **Connect**.


Wireless Network Connection 6
Network Tasks
Refresh network list
Set up a wireless network for a home or small office
Related Tasks
Learn about wireless networking
Change the order of preferred networks
Change advanced settings
Choose a wireless network
Click an item in the list below to connect to a wireless network in range or to get more information.
Test
Unsecured wireless network
default
Unsecured wireless network
salestest
Security-enabled wireless network
test1
Security-enabled wireless network
This network requires a network key. If you want to connect to this network, click Connect.
DGL-4300
Connect

3. The **Wireless Network Connection** box will appear. Enter the WPA-PSK Wi-Fi password and click **Connect**.


Wireless Network Connection
The network 'test1' requires a network key (also called a WEP key or WPA key). A network key helps prevent unknown intruders from connecting to this network.
Type the key, and then click Connect.
Network key:
Confirm network key:
Connect
Cancel

It may take 20-30 seconds to connect to the wireless network. If the connection fails, please verify that the WPA-PSK settings are correct. The Wi-Fi password must be exactly the same as on the wireless router.

Troubleshooting

This chapter provides solutions to problems that can occur during the installation and operation of the DIR-868L. Read the following descriptions if you are having problems. The examples below are illustrated in Windows® XP. If you have a different operating system, the screenshots on your computer will look similar to the following examples.

1. Why can't I access the web-based configuration utility?

When entering the IP address of the D-Link router (192.168.0.1 for example), you are not connecting to a website nor do you have to be connected to the Internet. The device has the utility built-in to a ROM chip in the device itself. Your computer must be on the same IP subnet to connect to the web-based utility.

- Make sure you have an updated Java-enabled web browser. We recommend the following:

  - Microsoft Internet Explorer® 7 and higher
  - Mozilla Firefox 3.5 and higher
  - Google™ Chrome 8 and higher
  - Apple Safari 4 and higher

- Verify physical connectivity by checking for solid link lights on the device. If you do not get a solid link light, try using a different cable or connect to a different port on the device if possible. If the computer is turned off, the link light may not be on.

- Disable any Internet security software running on the computer. Software firewalls such as Zone Alarm, Black Ice, Sygate, Norton Personal Firewall, and Windows® XP firewall may block access to the configuration pages. Check the help files included with your firewall software for more information on disabling or configuring it.

- Configure your Internet settings:
    - Go to **Start** > **Settings** > **Control Panel**. Double-click the **Internet Options** Icon. From the **Security** tab, click the button to restore the settings to their defaults.
    - Click the **Connection** tab and set the dial-up option to Never Dial a Connection. Click the LAN Settings button. Make sure nothing is checked. Click **OK**.
    - Go to the **Advanced** tab and click the button to restore these settings to their defaults. Click **OK** three times.
    - Close your web browser (if open) and open it.
- Access the web management. Open your web browser and enter the IP address of your D-Link router in the address bar. This should open the login page for your web management.
- If you still cannot access the configuration, unplug the power to the router for 10 seconds and plug back in. Wait about 30 seconds and try accessing the configuration. If you have multiple computers, try connecting using a different computer.

2. What can I do if I forgot my password?

If you forgot your password, you must reset your router. Unfortunately this process will change all your settings back to the factory defaults.

To reset the router, locate the reset button (hole) on the rear panel of the unit. With the router powered on, use a paperclip to hold the button down for 10 seconds. Release the button and the router will go through its reboot process. Wait about 30 seconds to access the router. The default IP address is 192.168.0.1. When logging in, the username is **admin** and leave the password box empty.

3. Why can't I connect to certain sites or send and receive emails when connecting through my router?

If you are having a problem sending or receiving email, or connecting to secure sites such as eBay, banking sites, and Hotmail, we suggest lowering the MTU in increments of ten (Ex. 1492, 1482, 1472, etc).

To find the proper MTU Size, you'll have to do a special ping of the destination you're trying to go to. A destination could be another computer, or a URL.

- Click on **Start** and then click **Run**.
- Windows® 95, 98, and Me users type in **command** (Windows® NT, 2000, XP, Vista®, and 7 users type in **cmd**) and press **Enter** (or click **OK**).
- Once the window opens, you'll need to do a special ping. Use the following syntax:

ping [url] [-f] [-l] [MTU value]

Example: **ping yahoo.com -f -l 1472**

```
C:\>ping yahoo.com -f -l 1482

Pinging yahoo.com [66.94.234.13] with 1482 bytes of data:

Packet needs to be fragmented but DF set.
Packet needs to be fragmented but DF set.
Packet needs to be fragmented but DF set.
Packet needs to be fragmented but DF set.

Ping statistics for 66.94.234.13:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum =  0ms, Average =  0ms

C:\>ping yahoo.com -f -l 1472

Pinging yahoo.com [66.94.234.13] with 1472 bytes of data:

Reply from 66.94.234.13: bytes=1472 time=93ms TTL=52
Reply from 66.94.234.13: bytes=1472 time=109ms TTL=52
Reply from 66.94.234.13: bytes=1472 time=125ms TTL=52
Reply from 66.94.234.13: bytes=1472 time=203ms TTL=52

Ping statistics for 66.94.234.13:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 93ms, Maximum =  203ms, Average =  132ms

C:\>
```

You should start at 1472 and work your way down by 10 each time. Once you get a reply, go up by 2 until you get a fragmented packet. Take that value and add 28 to the value to account for the various TCP/IP headers. For example, lets say that 1452 was the proper value, the actual MTU size would be 1480, which is the optimum for the network we're working with (1452+28=1480).

Once you find your MTU, you can now configure your router with the proper MTU size.

To change the MTU rate on your router follow the steps below:

- Open your browser, enter the IP address of your router (192.168.0.1) and click **OK**.
- Enter your username (admin) and password (blank by default). Click **OK** to enter the web configuration page for the device.
- Click on **Setup** and then click **Manual Configure**.
- To change the MTU enter the number in the MTU field and click **Save Settings** to save your settings.
- Test your email. If changing the MTU does not resolve the problem, continue changing the MTU in increments of ten.

Wireless Basics

D-Link wireless products are based on industry standards to provide easy-to-use and compatible high-speed wireless connectivity within your home, business or public access wireless networks. Strictly adhering to the IEEE standard, the D-Link wireless family of products will allow you to securely access the data you want, when and where you want it. You will be able to enjoy the freedom that wireless networking delivers.

A wireless local area network (WLAN) is a cellular computer network that transmits and receives data with radio signals instead of wires. Wireless LANs are used increasingly in both home and office environments, and public areas such as airports, coffee shops and universities. Innovative ways to utilize WLAN technology are helping people to work and communicate more efficiently. Increased mobility and the absence of cabling and other fixed infrastructure have proven to be beneficial for many users.

Wireless users can use the same applications they use on a wired network. Wireless adapter cards used on laptop and desktop systems support the same protocols as Ethernet adapter cards.

Under many circumstances, it may be desirable for mobile network devices to link to a conventional Ethernet LAN in order to use servers, printers or an Internet connection supplied through the wired LAN. A Wireless Router is a device used to provide this link.

What is Wireless?

Wireless or Wi-Fi technology is another way of connecting your computer to the network without using wires. Wi-Fi uses radio frequency to connect wirelessly, so you have the freedom to connect computers anywhere in your home or office network.

Why D-Link Wireless?

D-Link is the worldwide leader and award winning designer, developer, and manufacturer of networking products. D-Link delivers the performance you need at a price you can afford. D-Link has all the products you need to build your network.

How does wireless work?

Wireless works similar to how cordless phone work, through radio signals to transmit data from one point A to point B. But wireless technology has restrictions as to how you can access the network. You must be within the wireless network range area to be able to connect your computer. There are two different types of wireless networks Wireless Local Area Network (WLAN), and Wireless Personal Area Network (WPAN).

Wireless Local Area Network (WLAN)

In a wireless local area network, a device called an Access Point (AP) connects computers to the network. The access point has a small antenna attached to it, which allows it to transmit data back and forth over radio signals. With an indoor access point as seen in the picture, the signal can travel up to 300 feet. With an outdoor access point the signal can reach out up to 30 miles to serve places like manufacturing plants, industrial locations, college and high school campuses, airports, golf courses, and many other outdoor venues.

Wireless Personal Area Network (WPAN)

Bluetooth is the industry standard wireless technology used for WPAN. Bluetooth devices in WPAN operate in a range up to 30 feet away.

Compared to WLAN the speed and wireless operation range are both less than WLAN, but in return it doesn't use nearly as much power which makes it ideal for personal devices, such as mobile phones, PDAs, headphones, laptops, speakers, and other devices that operate on batteries.

Who uses wireless?

Wireless technology as become so popular in recent years that almost everyone is using it, whether it's for home, office, business, D-Link has a wireless solution for it.

Home

- Gives everyone at home broadband access
- Surf the web, check email, instant message, etc.
- Gets rid of the cables around the house
- Simple and easy to use

Small Office and Home Office

- Stay on top of everything at home as you would at office
- Remotely access your office network from home
- Share Internet connection and printer with multiple computers
- No need to dedicate office space

Where is wireless used?

Wireless technology is expanding everywhere not just at home or office. People like the freedom of mobility and it's becoming so popular that more and more public facilities now provide wireless access to attract people. The wireless connection in public places is usually called "hotspots".

Using a D-Link Cardbus Adapter with your laptop, you can access the hotspot to connect to Internet from remote locations like: Airports, Hotels, Coffee Shops, Libraries, Restaurants, and Convention Centers.

Wireless network is easy to setup, but if you're installing it for the first time it could be quite a task not knowing where to start. That's why we've put together a few setup steps and tips to help you through the process of setting up a wireless network.

Tips

Here are a few things to keep in mind, when you install a wireless network.

Centralize your router or Access Point

Make sure you place the router/access point in a centralized location within your network for the best performance. Try to place the router/access point as high as possible in the room, so the signal gets dispersed throughout your home. If you have a two-story home, you may need a repeater to boost the signal to extend the range.

Eliminate Interference

Place home appliances such as cordless telephones, microwaves, and televisions as far away as possible from the router/access point. This would significantly reduce any interference that the appliances might cause since they operate on same frequency.

Security

Don't let you next-door neighbors or intruders connect to your wireless network. Secure your wireless network by turning on the WPA or WEP security feature on the router. Refer to product manual for detail information on how to set it up.

Wireless Modes

There are basically two modes of networking:

- **Infrastructure** – All wireless clients will connect to an access point or wireless router.
- **Ad-Hoc** – Directly connecting to another computer, for peer-to-peer communication, using wireless network adapters on each computer, such as two or more DIR-868L wireless network Cardbus adapters.

An Infrastructure network contains an Access Point or wireless router. All the wireless devices, or clients, will connect to the wireless router or access point.

An Ad-Hoc network contains only clients, such as laptops with wireless cardbus adapters. All the adapters must be in Ad-Hoc mode to communicate.

Networking Basics

Check your IP address

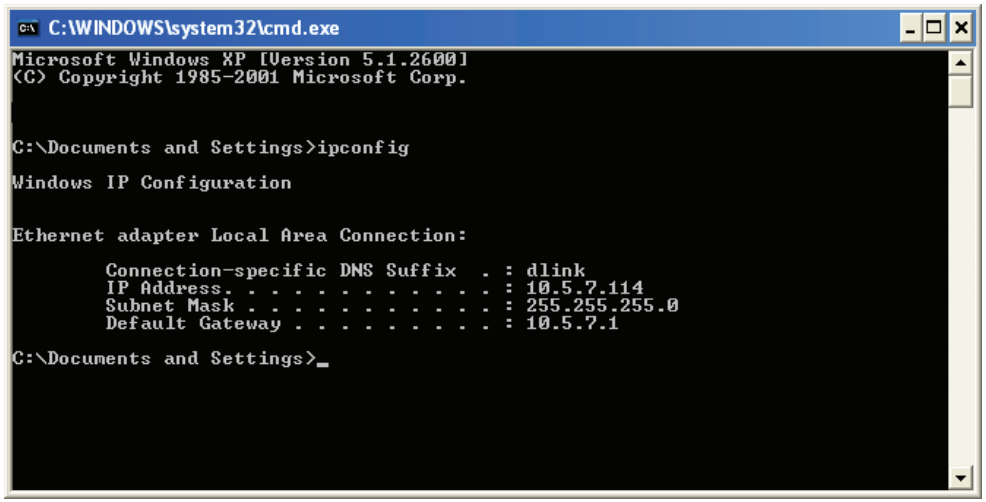
After you install your new D-Link adapter, by default, the TCP/IP settings should be set to obtain an IP address from a DHCP server (i.e. wireless router) automatically. To verify your IP address, please follow the steps below.

Click on **Start** > **Run**. In the run box type ***cmd*** and click **OK.** (Windows® 7/Vista® users type *cmd* in the **Start Search** box.)

At the prompt, type ***ipconfig*** and press **Enter**.

This will display the IP address, subnet mask, and the default gateway of your adapter.

If the address is 0.0.0.0, check your adapter installation, security settings, and the settings on your router. Some firewall software programs may block a DHCP request on newly installed adapters.


C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.
C:\Documents and Settings>ipconfig
Windows IP Configuration
Ethernet adapter Local Area Connection:
Connection-specific DNS Suffix . : dlink
IP Address. . . . . : 10.5.7.114
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : 10.5.7.1
C:\Documents and Settings>

Statically Assign an IP address

If you are not using a DHCP capable gateway/router, or you need to assign a static IP address, please follow the steps below:

Step 1

Windows® 7 - Click on **Start** > **Control Panel** > **Network and Internet** > **Network and Sharing Center**.

Windows Vista® - Click on **Start** > **Control Panel** > **Network and Internet** > **Network and Sharing Center** > **Manage Network Connections.**

Windows® XP - Click on **Start** > **Control Panel** > **Network Connections**.

Windows® 2000 - From the desktop, right-click **My Network Places** > **Properties**.

Step 2

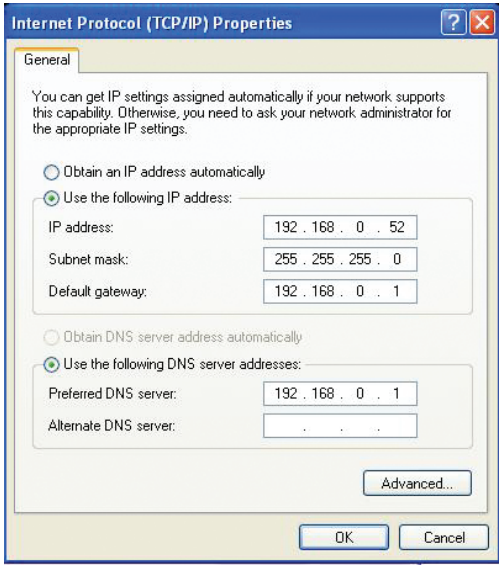
Right-click on the **Local Area Connection** which represents your network adapter and select **Properties**.

Step 3

Highlight **Internet Protocol (TCP/IP)** and click **Properties**.

Step 4

Click **Use the following IP address** and enter an IP address that is on the same subnet as your network or the LAN IP address on your router.


Internet Protocol (TCP/IP) Properties
General
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address: 192 . 168 . 0 . 52
Subnet mask: 255 . 255 . 255 . 0
Default gateway: 192 . 168 . 0 . 1
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server: 192 . 168 . 0 . 1
Alternate DNS server:
Advanced...
OK
Cancel

Example: If the router´s LAN IP address is 192.168.0.1, make your IP address 192.168.0.X where X is a number between 2 and 99. Make sure that the number you choose is not in use on the network. Set the Default Gateway the same as the LAN IP address of your router (I.E. 192.168.0.1).

Set Primary DNS the same as the LAN IP address of your router (192.168.0.1). The Secondary DNS is not needed or you may enter a DNS server from your ISP.

Step 5

Click **OK** twice to save your settings.

Wireless Security

This section will show you the different levels of security you can use to protect your data from intruders. The DIR-868L offers the following types of security:

- WPA2 (Wi-Fi Protected Access 2)
- WPA (Wi-Fi Protected Access)
- WPA2-PSK (Pre-Shared Key)
- WPA-PSK (Pre-Shared Key)

What is WPA?

WPA (Wi-Fi Protected Access), is a Wi-Fi standard that was designed to improve the security features of WEP (Wired Equivalent Privacy).

The 2 major improvements over WEP:

- Improved data encryption through the Temporal Key Integrity Protocol (TKIP). TKIP scrambles the keys using a hashing algorithm and, by adding an integrity-checking feature, ensures that the keys haven't been tampered with. WPA2 is based on 802.11i and uses Advanced Encryption Standard (AES) instead of TKIP.

- User authentication, which is generally missing in WEP, through the extensible authentication protocol (EAP). WEP regulates access to a wireless network based on a computer's hardware-specific MAC address, which is relatively simple to be sniffed out and stolen. EAP is built on a more secure public-key encryption system to ensure that only authorized network users can access the network.

WPA-PSK/WPA2-PSK uses a passphrase or key to authenticate your wireless connection. The key is an alpha-numeric password between 8 and 63 characters long. The password can include symbols (!?*&_) and spaces. This key must be the exact same key entered on your wireless router or access point.

WPA/WPA2 incorporates user authentication through the Extensible Authentication Protocol (EAP). EAP is built on a more secure public key encryption system to ensure that only authorized network users can access the network.

Technical Specifications

Device Interfaces
- 802.11 a/b/g/n/ac wireless LAN
- Four 10/100/1000 Gigabit LAN ports
- 10/100/1000 Gigabit WAN port
- USB 3.0 port

Antenna Types
- Six internal antennas

Standards
- IEEE 802.11ac (draft)
- IEEE 802.11n
- IEEE 802.11g
- IEEE 802.11b
- IEEE 802.11a
- IEEE 802.3
- IEEE 802.3u

Security
- WPA™ - Personal/Enterprise
- WPA2™ - Personal/Enterprise
- Wi-Fi Protected Setup (WPS) PIN/PBC

Power
- Input: 100 to 240 V AC, 50/60 Hz
- Output: 12 V DC, 2.5 A

USB Port Power
- 5 V / 0.9 A

Operating Temperature
- 32°F to 104°F (0°C to 40°C)

Humidity
- 95% maximum (non-condensing)

Safety & Emissions
- FCC Class B
- CE Class B
- C-Tick
- DLNA
- IPv6 Ready
- Wi-Fi Protected Setup (WPS)
- Wi-Fi Multimedia (WMM)
- Compatible with Windows 8

Dimensions
- L = 102.3 mm (4.03 inches)
- W = 123.3 mm (4.85 inches)
- H = 217 mm (8.54 inches)

1 Maximum wireless signal rate derived from IEEE Standard 802.11a, 802.11g, and 802.11n specifications. Actual data throughput will vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, and network overhead, lower actual data throughput rate. Environmental factors will adversely affect wireless signal range.

2 Frequency Range varies depending on country's regulation.

3 The DIR-868L does not include 5.25-5.35GHz & 5.47-5.725GHz in some regions.